

SEVENTH

ANNUAL REPORT

OF

THE PRESIDENT AND DIRECTORS

OF THE

CHESAPEAKE AND OHIO CANAL COMPANY

TO THE STOCKHOLDERS.

MADE JUNE 1, 1835.

WASHINGTON:

PRINTED BY GALES AND SEATON.

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REPORT.

THE President and Directors, in presenting the Seventh Annual Report to the Stockholders of the Chesapeake and Ohio Canal Company, cannot refrain from offering their congratulations on the auspicious circumstances under which this meeting has convened; when doubts and fears have given place to confidence and hope, and the prospects of the future are as cheering as the past has been discouraging. Whilst, on the one hand, we wish to avoid prolixity and unnecessary detail, on the other, we desire to possess the stockholders of all such information as may be useful or interesting to them, embracing a view of the progress and cost of the canal, its present condition, and plans for its further prosecution and early completion.

Our recent report, presented at a special meeting of the stockholders in April last, informed them fully of the embarrassments which attended us during the past year; of the means by which we were enabled to prosecute and complete the work, so as to open it for navigation to dam No. 5; the failure of our applications to the United States and Virginia; and of our final success in obtaining a loan from the State of Maryland, affording the means for a spirited prosecution of the eastern section, and strongly fortifying our belief in the ultimate connexion with the Western waters.

A continuous canal is now opened for navigation for the distance of one hundred and ten miles, from the basin in Washington to dam No. 5, with the exception of about three miles of back water above dam No. 4, along Galloway's cliffs, where it is designed to construct a towpath, using the river (having a depth of from ten to fifteen feet) in place of a canal; or, should it be deemed more expedient, to employ small steamboats for the purpose of towing the burden boats, at the same time conveying the horses.

The history of the canal from its commencement, embracing every subject connected with its progress, especially its cost, construction, and probable revenue, has been so frequently presented to the stockholders in detailed reports of the board, by committees of the late Internal Improvement Convention, and engineers deputed by the Department of War to examine it, that we deem it an unnecessary trespass on your time and patience further to notice the subject than by a general outline. We particularly refer the stockholders to the able report made to Congress in April, 1834, by the chairman of the Committee on Roads and Canals, which embodies all the information

Sett 20 Oct 31 Bridges = 3 miles

to that date, which could be presented by a mind of the highest intelligence, directed by the most ardent and untiring zeal.

The entire expenditure upon the *canal* at this time, including acquisitions of lands, engineer department, pay of officers, and all other expenses, is \$4,200,590; of which sum, near half a million of dollars was expended on the costly construction through Georgetown and Washington to the Tiber basin. This measure was the result of a compromise at a general meeting convened for the purpose, when the individual stockholders and governments composing the company gave their assent, and directed the work to be executed. It was considered at the time by many, (including the president, and a majority, if not all the directors,) impolitic to abstract so large a sum from the means of the company, thereby retarding and greatly limiting the western extension of the canal, especially as the prospect of further pecuniary aid was by no means certain.

The completion of the canal to Cumberland being no longer considered a question of doubt, the objections formerly urged to this expenditure within the District have ceased in a great degree to exist, and it is confidently believed that, ere long, results highly beneficial to the stockholders, and the District, will be felt from this improvement.

The water power furnished by the canal within the District of Columbia is perhaps unequalled in this country; and no situation can combine more advantages, or offer higher recommendations, for the erection of machinery of every description.

The basin of Rock creek is capacious, and affords a safe harbor for boats, whilst the mole, one thousand feet in length, and one hundred and sixty in breadth, (a property of great value,) offers every convenience and facility for the loading and unloading of boats on the basin, and sea vessels on the river side.

The canal from Georgetown to the Little Falls is 80 feet wide at the water line, and 7 feet deep, and to Harper's Ferry averages fully 60 feet in width, and 6 feet in depth; from that point to dam No. 5, eight miles above Williamsport, it is reduced to 50 in width, and 6 in depth, and will retain the same proportions to Cumberland. There are no obstructions from Georgetown to the western limit of the canal, to prevent the free passage of steamboats, the only permanent bridges being at an elevation of 17 feet from the water line.

The masonry is admitted by all who have had the opportunity of judging, to be equal to any on similar works, either in this country or Europe.

The locks are 52 in number, including 4 guard and 2 tide locks, and 2 lift locks to accommodate the Virginia trade. The elevation being 353 feet from tide water to dam No. 5, is overcome by 44 locks, averaging about 8 feet lift, 100 feet in length, by 15 in width. With the exception of some of the upper locks, where temporary buildings are used, comfortable stone houses have been erected for the keepers.

The five aqueducts are all constructed of solid masonry. No. 1, over Seneca, built of red sandstone, is 114 feet in length, resting on a solid rock foundation. It has three arches of 33 feet span each.

Aqueduct No. 2, over the Monocacy river, is a very splendid work, built of a superior granite stone, resembling white marble. It is 516 feet from end to end of the wing walls, resting on seven arches of 54 feet span each.

Aqueduct No. 3 is over the Catoclin creek, about three miles above the Point of Rocks. It has three arches, 2 of 20 feet, and the other 40 feet span.

Aqueduct No. 4, over the Antietam, is constructed with three arches, 2 of 28 feet, and the other 40 feet span.

Aqueduct No. 5 crosses the Conococheague at Williamsport, on three arches of 60 feet span, and is built of very superior limestone. The culverts are 136 in number, varying from 2 feet to more than 30 feet in width, and from 100 to 110 feet in length. Several of them are used as roadways under the canal.

The entire canal is fed from five dams. 1st. The Little Falls feeder, which supplies the canal from that point to the basin in Washington. 2d. The feeder at Seneca, supplying seventeen miles; in addition to which, a small supply is received at the Great Falls through an arch under the towing path. 3d. The canal for the next forty miles is supplied principally from the Potomac at the head of Harper's Ferry falls. The dam at this place was constructed by the United States for the purposes of the national armory. For the distance of forty-two and a half miles above this point, the supply of water is had from the two dams, Nos. 4 and 5, recently finished by the company.

Protection walls, embracing fully thirty miles in extent, have been constructed on the line of the canal, varying from ten to twenty feet in height, and, in some places, from forty to sixty feet.

The above imperfect and brief description can convey but a faint idea of the magnitude of this work, or of the difficulties which have been encountered and overcome.

Our success so far has forever put to flight the evil forebodings and doubts of sceptics, who boldly pronounced the enterprise to be impracticable and visionary; and we have the consolation of knowing that there are no difficulties in advance so appalling as those we have triumphantly passed.

Since the last annual meeting of the stockholders, all the unfinished work then under contract, from Holma's, or dam No. 4, to dam No. 5, has been finished, and opened for navigation. These dams are works of great magnitude, the first 810 feet in length, the second 706 feet long, and each about 20 feet in height, being feeders to the canal, the one for 23½ miles, the other for 19 miles.

They are believed to be constructed on the most approved plans, of the best materials, and give the promise of great strength and durability.

The most earnest and earliest efforts of the board were directed to the security and completion of these stupendous works, which, in June last, were about half finished, and in a state of evident insecurity. Large sums of money had then been expended on them, and the most fatal consequences were to be apprehended, in the event of their not being placed in a condition of security before the winter floods, which, in all probability, would have swept them off. Had such a disaster befallen us, we should not have assembled here with the buoyant hopes which now animate us. Confidence would have fled, followed by distrust and gloom, overshadowing the whole enterprise, and paralyzing the efforts of our best disposed and firmest friends.

The largest force which our limited means justified was placed on these works, their final completion relieving us from the most anxious solicitude.

The heavy sections below Williamsport, which, for want of means, had been temporarily suspended, were again placed under contract, and finished about the 1st of April.

But few breaches, and (with a single exception) none of much consequence, have occurred on the line of canal above Harper's Ferry; nor has the navigation above that point been interrupted except for a few days. The principal breach is said to have been produced by the carelessness of some persons in rolling logs into the canal from a precipice overhanging it.

Instructions have been given to the superintendent on that division to inquire into the facts, and communicate them to the board, when, should the reports be true, such steps will be taken as the occasion demands for our protection in future. It is rather a source of congratulation that so few accidents have occurred on the line of new work above Harper's Ferry. It is well known that time is required to give solidity to embankments, and to detect the leaks from fissures and sinks incident to a limestone region, being the character of that through which the works pass of recent construction. The experience of our engineers and contractors in practical construction, it is confidently believed, will, in the further prosecution of the work, ensure it against those accidents which have heretofore occurred on this and other canals. Much depends on a judicious location, and, when practicable, by obtaining a high level, to avoid approaching too closely the river banks. But our main reliance will be on the fidelity of our contractors, and the vigilance of our engineers and superintendents, whose constant presence on their divisions during the construction of the work will be required by the board; nor will any officer be retained a moment in the service of the company, who shall be found neglectful of his charge. We cannot,

however, but hope and believe that all in our service, fully impressed with the responsibility they assume, will, by an active and faithful discharge of their duties, merit the confidence reposed in them by the board.

The trade between the District and Harper's Ferry has been interrupted for several days during the present year, by the unfortunate occurrence of two or three breaches, the most considerable of which was at the Catoctin aqueduct. In order that the repairs at this point be made effectual and permanent, a temporary trunk has been constructed over the breach, by which boats can pass without difficulty, and the work is now progressing, and will be completed with all practicable despatch. The board, sensibly impressed with the inconvenience to the public and loss to the company, by the interruption to the navigation, occasioned by breaches, have deemed it of the first importance to have a thorough and critical examination of the entire canal from Georgetown to dam No. 5, with the view of having such repairs made and points strengthened during the present season, as will effectually secure it for the future against the recurrence of breaches. The board accordingly directed Mr. Purcell and Mr. Fisk to make the necessary examinations, and report to the board, which has been done, and a portion of the work is now under contract.

Desirous of commencing the extension of the canal with the least possible delay, the board deputed a corps of engineers, under the direction of Mr. Fisk, to locate the line from dam No. 5 to the dam to be constructed near the mouth of Cacapon, and to prepare it for letting to contractors as soon as practicable. The distance is about twenty-seven miles, and was surveyed and located, under orders of the board, in the spring of 1834, by Mr. Cruger; some alterations of that location being deemed advisable, the party under Mr. Fisk has been actively engaged for some weeks in the revision, and he calculates on having the line designated for contract by the 15th instant. Engineer Purcell, with an adequate party, is now engaged in the survey of the line from the South Branch, sixteen miles below Cumberland, to the latter place. It is intended to commence the survey and location of the line between Cacapon and the South Branch so soon as the necessary arrangements can be made for the purpose, and we confidently believe that in the course of the summer all the masonry, dams, and difficult sections, may be placed under contract.

The board contemplates placing under immediate contract only the most difficult and heavy sections, including the dams, aqueducts, locks, and culverts. These require considerable time for their construction, and for obtaining and preparing the necessary materials. A considerable portion of the sections to Cumberland will be located through alluvial bottoms, of easy execution, and requiring but few months to complete them. They can, without difficulty, be prepared for the reception of the water, by letting them, after considera-

ble progress has been made in the heavier work. The experience of the past teaches us a useful lesson on this subject, in the manifest disadvantage of completing light sections for a length of time before the admission of the water. The embankments are liable to be washed into the canal by heavy rains, requiring the earth to be cleaned out, and the banks dressed over, at considerable cost.

The board has adopted measures to obtain of the proprietors of the lands through which the canal may be located, by amicable arrangement, the right of way. It is believed that they fully appreciate the benefits which must result to them in the facilities the canal will afford, and the enhanced value of their property, and will meet the views of the board in a liberal spirit.

We regret to find that, as we ascend the Potomac, (unless in the immediate vicinity of Cumberland,) stone of suitable quality for the construction of locks and aqueducts is both scarce, and very inferior to the quarries we have passed. The superintendent of masonry has been engaged for some time in an examination of the country adjacent to the canal, with the view of ascertaining the supply of this material to be relied on.

In the contemplation of a failure to find suitable stone for locks, and their enhanced cost where the material is not very accessible, or has to be transported a distance by land, it has been suggested that, at the points where these difficulties are found to exist, temporary wooden locks might be used with advantage, which would probably last for fifteen years, and might be replaced, when they begin to fail, by stone, which could be dressed at the splendid quarries below, and transported on the canal at a comparatively small cost. The materials all being prepared, and on the spot, by a simultaneous operation the whole work might be accomplished in from four to six weeks, selecting the season when the least inconvenience would attend the interruption of trade. The region where stone of good quality ceases to abound is heavily timbered, and the latter material could be had, of any description required, on the most reasonable terms. The time required for their construction would be much less than if built of stone, and the probable difference in cost would be as three to one. By this course, the early completion of the canal to Cumberland would be hastened, and the large sum saved in the construction of locks be applied in furtherance of that object. The board, in offering these suggestions for the consideration of the stockholders, do not wish to be understood as recommending any permanent departure from the plan of execution heretofore contemplated, and that this deviation should only be adopted should the necessity of the case, on further inquiry and examination, justify it.

The original plan contemplates a continuous, independent canal from tide water to its western termination; nor as yet has there been any deviation, with the exception of about three miles of still water, or pool navigation, immediately above dam No. 4, where, for nearly

the entire distance, the river, ten or fifteen feet in depth, washes the base of high, precipitous cliffs of rock, rendering the construction of a canal very costly, and even the estimated cost of a towpath not less than \$30,000. Similar difficulties, though not of equal extent, in the construction of a canal, are presented in the distance of about two miles, from dam No. 5 to the western termination of Charles's cliffs, where stupendous bluffs of limestone, one hundred feet in height, overhang the river, which, at their base, is twenty feet in depth. Before the difficulties of construction were enhanced by the reflux water from dam No. 5, the estimated cost, by Geddes and Roberts, of one mile at this point, was \$65,941 75. Presuming their calculations to be correct, we could not prudently assume a less sum than \$100,000 as the cost of a canal from the dam to the upper point of the cliffs. Both of these pools offer a safe navigation to ascending and descending boats, but are liable to the objections of having to send the horses employed in towing several miles around, to meet the boats, beside the delay from the slow progress made by boats heavily loaded, when propelled by oars, the water being too deep for the use of poles.

The principal argument in favor of a connected canal at these points is, that, in the event of an accident to either of the dams, the one next above would still continue to feed the canal until the repairs could be made. Our reliance must be on the durability of our dams, which now give the promise of strengthening with time; but should either fail, then would be the most favorable time for constructing the canal, when the stream would be reduced to its natural level, and consequently the difficulty and cost of the work would be greatly diminished.

For these considerations, and others, (which, for the sake of brevity, are omitted,) the board are impressed with the belief that a prudent expenditure of probably \$150,000 at these points can be dispensed with, and applied to the prosecution of the canal to Cumberland, whilst, for less than the interest on the estimated cost, every requisite facility may be given for the safe and speedy navigation of the pools, by the use of small steamboats of about ten horse power, constructed so as to take on board the horses, at the same time towing the boats. The distance is such that the boats would be towed from one point to the other in the course of a few minutes, and, in fact, the steamboat would be always in sight to receive signals. The size of the boats might be about eighty-five feet in length, and fourteen in width, with stern wheels, and would conveniently pass through the locks, the estimated cost being about \$4,000 each. These boats might either be the property of the company, and under the direction of its officers, or left to individual enterprise, which we have no doubt would be directed to the subject under a fair and liberal arrangement. We believe that the same enterprise will very soon introduce on the canal a regular line of packet boats from dam No. 5 to the District,

of which the steamboats on the pools would constitute a connecting link. The strongest inducements are held out to individuals to engage in the undertaking, from the fact that the intercourse is daily increasing between the District and the upper country, and nothing but a commencement is required to ensure a steady patronage, and ample remuneration. That a very considerable portion of the travelling, east and west, will take the direction of the canal, we cannot doubt, when we reflect that the great western road at Clear Spring is within two miles of Charles's mill, on the pool of dam No. 5, to which place there is a good road; and when a regular line of packets is established, there will, no doubt, be stages from Clear Spring in connexion with them. Travellers, after the fatiguing transit of the mountains, will find this mode of conveyance an agreeable relief, and will take the canal route. If destined for Baltimore, or further east, they can elect either to pursue the entire canal to Washington, taking the railroad cars at that point, at Harper's Ferry, or the Point of Rocks. Curiosity will induce travellers to view the magnificent scenery of the Potomac, and, at the same time, two of the greatest works which have been executed in our country.

The receipts from tolls have necessarily been much limited, in consequence of the obstructions from the erection of dams Nos 4 and 5, the division between them having only been opened for trade in April, and many interruptions since that time having occurred from unfortunate breaches; against the recurrence of which, the board is providing, as is believed, an effectual remedy, by adding strength at every suspicious point on the line of canal.

The evidences of increasing trade are daily multiplying, and from sources which have heretofore been alien to us. Already have the agricultural products and manufactured iron of Pennsylvania been brought to the canal at Williamsport, as the readiest and cheapest mode of conveyance to ports for transshipment to Eastern markets. In anticipation of the completion of the canal to Cumberland, property in Allegany county, especially in the bituminous coal region, has experienced a considerable advance, and capitalists are directing their attention to the acquisition of this valuable mineral, in view of the almost unlimited demand for it, which will be ensured by the opening of the canal from Cumberland. The extension of the canal to Cacapon, contracts for which will be made during the present month, brings us to the commencement of one of the heaviest timbered regions south of the Allegany, bordering on the Potomac, and penetrated by its tributary streams, estimated to exceed 16,000 square miles. The unbounded resources to be derived from coal and lumber alone, would fully justify the most sanguine calculations which have ever been made of the future revenue of this canal. But all doubts must vanish when we reflect on the auxiliary aids to be derived from so many other fruitful sources; among which may be enumerated the agricultural products of the rich and extensive country bordering on

the Potomac and Shenandoah, and the numerous tributaries to those noble rivers, all susceptible of improvement, and even in their natural state embracing a navigation, in high water, of 500 miles. Anthracite coal has been discovered within twelve miles of the canal; iron of the best quality is found in abundance at many points; limestone, common and hydraulic, and marble, variegated and white, inexhaustible in quantity, are distributed along the line of the canal. To all these may be added the ascending trade in fish, gypsum, salt, &c., and the transportation trade from Wheeling and Pittsburg, on reaching Cumberland. The amount of trade, when the union of the Western waters with the Potomac is effected, will be so vast as at this day to defy human calculation. The cities of this District, as well as the great commercial emporium of Maryland, may look forward with confidence to the highest degree of prosperity from this and other works of internal improvement connecting with it, furnishing the means of an active and increasing commerce. The truth of this prediction may be well illustrated by a fact in relation to the coal trade alone of the Schuylkill, which has recently been published, and which employed, in 1833, nearly as much tonnage as was engaged in the whole foreign trade of the States of New Jersey, Pennsylvania, Delaware, Maryland, Virginia, North Carolina, and the District of Columbia, united.

It is true that we have encountered many difficulties in our progress, which was delayed by the unfortunate and protracted controversy, for the right of way, with the Baltimore and Ohio Railroad Company, and, since the compromise of that question, by the restricted means of the company not justifying an extended operation. The revenue from tolls has been small, from causes heretofore explained; nor could a profitable result be expected, until those great resources which we have mentioned in this report are brought to our aid. We should be cheered in our onward progress by the prospect and hope of soon seizing on those rich treasures which nature has so lavishly placed within our reach, the possession of which will amply compensate for all the trouble and cost we have encountered in achieving this noble enterprise.

Under the late law and supplemental resolution of Maryland, making a loan of \$2,000,000 to the Chesapeake and Ohio Canal Company, provision was made for the alteration of the tariff of tolls; in compliance with which, the board, conjointly with the commissioners of Maryland, have arranged a tariff of tolls, to go into effect on the 1st of July. Such alterations have been made in the existing tariff, as, in the opinion of the board, will conduce to the interest of the company, and at the same time give general satisfaction.

The stockholders, at a general meeting in June, 1830, adopted a resolution recommending that the president and directors should appoint an officer, to be styled "Commissioner of the Chesapeake and Ohio Canal." This resolution not being imperative, and the

board not deeming the services of such an officer necessary at that time, deferred making the appointment. But the operations on the canal proposed to be placed under contract, being now more extended and distant from the board, the appointment of a commissioner was deemed highly important to the interests of the company. In accordance with this opinion, the board conferred the appointment on Major George Bender, late a director of the company, whose high character, known integrity, and business habits, pre-eminently fit him for the situation, and give every assurance that the trust reposed in him will be performed in a manner as honorable to himself as serviceable to the company.

The duties of his office are various and of high responsibility. Through him all communications between the board and engineers and contractors are to be made. He has a general supervision of the line of construction, makes all contracts for materials, &c., subject to the ratification of the board; liquidates all accounts, and disburses all moneys expended on the works to be placed under contract, in the further progress of the canal. He is to make regular returns and reports to the board, and to communicate all matters of interest. He will be located at a convenient point, to communicate freely with the officers and agents of the company, and to give his personal attention to the work. By the appointment of this officer, a system of order, regularity, and proper responsibility is introduced, which will conduce much towards the active and harmonious operations of the company in every department, and in the economy of its expenditures.

The incessant and laborious duties imposed on the clerk of the company, with the inadequate aid he has heretofore had, rendered it wholly out of his power to arrange and record the numerous title papers of the company for the acquisition of the lands through which the canal passes. The delay which had occurred, rendered it a work of time and great labor to arrange and record these papers. This duty was, however, gratuitously undertaken by Major Bender, and very considerable progress made in the work previous to his appointment as your commissioner. The results of his labors, now in the office, are open to the inspection of the stockholders, who will at once perceive the exercise of mind, as well as the heavy clerical labor, which was employed in the performance of this voluntary task. The board, sensibly impressed with the value of this service, would be doing injustice to the liberal feelings of the stockholders, did they not present these facts, and at the same time recommend that authority be given them to make suitable recompense to Major Bender.

On the 24th of March, 1834, the stockholders adopted a preamble and resolutions proposing a compromise of the claims of creditors of the late Potomac Company, their assent to the terms to be signified by the 1st of July following. Under the proposition offered, several of the creditors have acceded to the terms, and, since July last, others

have offered to accept them. We would, therefore, recommend that time for further acceptance be extended to the 1st of January next.

Some propositions having been made to the board, for the introduction, by individuals or companies, of steam packet boats on the canal, the board advertised that time would be given, until the 1st of August, for the trial of such boats on the canal as would not abrade the banks, and would move at the speed of not less than eight miles an hour, giving to the boat best adapted to the purpose the privilege of navigating the canal for one year, free of charge.

We have not as yet been informed whether any boats of this description are in preparation, but entertain the hope that the experiment may be tried. The width and depth of the canal, and its freedom from any impediment by bridges or other obstructions, offer inducements for steamboat navigation, which are not to be found on any other canal of the same extent in America. Appended to this report are tabular statements, presenting a view of the expenditures of the company, and its existing obligations, its receipts from tolls, and also the law of Maryland, and supplement thereto, providing for the completion of the Chesapeake and Ohio canal to Cumberland.

All which is respectfully submitted.

Signed in behalf of the President and Directors:

G. C. WASHINGTON,
Pres. of the Chesapeake and Ohio Canal Company.

General Abstract of Receipts and Payments by the Treasurer of the Chesapeake and Ohio Canal, also the Receipts and Payments for the

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	Receipts for the year ending 31st May, 1835.	Aggregate receipts.
To capital stock, - - - - -	\$41,038 46	\$3,792,416 58
To Potomac Company, general account, - - -	-	418 52
To Potomac Company, unclaimed dividends, -	-	366 30
To toll account, - - - - -	21,628 48	123,332 16
To acquisition of lands, - - - - -	-	1,029 91
To engineer department, - - - - -	-	2,500 24
To construction of the canal, - - - - -	-	6,657 20
To law expenses, - - - - -	121 41	1,575 94
To interest account, - - - - -	10,321 22	17,918 21
To profit and loss, - - - - -	-	2,309 72
To Baltimore and Ohio Railroad Company, -	-	266,000 02
To notes payable, - - - - -	254,500 00	265,500 00
	\$327,609 57	\$4,480,024 80

peake and Ohio Canal Company, to the 1st day of June, 1835; exhibiting year ending on the 31st day of May, 1835.

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	Payments for the year ending 31st May, 1835.	Aggregate payments.
By corporation of Washington, - - -	-	\$175,000 00
By corporation of Georgetown, - - -	-	43,750 00
By Potomac Company, unclaimed dividends, - - -	-	5 55
By Potomac Company, toll account, - - -	-	934 46
By acquisition of lands, - - -	\$4,851 80	176,657 26
By engineer department, - - -	6,640 97	128,142 99
By construction of the canal, - - -	317,619 21	3,766,677 17
By law expenses, - - -	2,798 64	17,696 57
By interest, - - -	8,346 04	13,512 06
By pay of officers, - - -	6,335 30	49,771 59
By stationery, - - -	168 12	1,921 49
By printing, - - -	725 84	6,347 92
By postages, - - -	182 83	589 33
By western section, - - -	11 00	4,037 08
By lock-keepers' salaries, - - -	6,073 90	17,020 58
By contingent expenses, - - -	3,475 40	17,656 25
	<u>\$357,229 05</u>	<u>\$4,420,220 30</u>
By balances to the credit of the Chesapeake and Ohio Canal Company in Bank U. States, Washington, -	\$64 90	
Do. in Bank of Washington, - - -	3,911 64	
Do. in Bank of the Metropolis, - - -	17 21	
Do. in Patriotic Bank, - - -	4,404 24	
Do. in Farmers and Mechanics' Bank of Georgetown, -	5,801 47	
Do. in Bank of Alexandria, - - -	15 48	
Do. in Bank of Potomac, - - -	1,026 12	
Do. in bank of Hagerstown, - - -	16 40	
Do. in Cumberland Bank of Alleghany, - - -	1 40	
Do. in Bank of the Valley, Charlestown, - - -	12 09	
Do. in Washington County Bank, Williamsport, -	513 87	
Do. in Bank of the Valley, Leesburg, - - -	19 68	
	<u>\$15,804 50</u>	
By stock of the State of Maryland, 5 per cent. -	44,000 00	
		<u>59,804 50</u>
		<u>\$4,480,024 80</u>

(E. E.) OFFICE OF THE TREASURER CHESAPEAKE AND OHIO }
CANAL Co., WASHINGTON, June 1, 1835. }

ROBERT BARNARD, *Treasurer.*

Statement of the Debts and Credits of the Chesapeake and Ohio Canal Company on the 1st day of June, 1835.

Amount of acceptances made, - - - - -	\$406,551 80
Small notes issued on pledge of stock, - - - - -	\$100,705 00
Less, amount advanced to the agent of the trustees, for redemption, - - - - -	69,445 00
	<hr/> 31,260 00
Accounts liquidated, - - - - -	41,940 29
Accounts unliquidated, estimated at - - - - -	15,000 00
Judgments rendered, do. - - - - -	30,000 00
Due for lands, do. - - - - -	35,000 00
	<hr/> \$559,752 09

Means applicable to the above.

Due by stockholders, - - - - -	\$191,783 42
Off, for doubtful debts, - - - - -	100,000 00
	<hr/> \$91,783 42
Stocks—State of Maryland, - - - - -	\$44,000 00
Corporation of Washington, - - - - -	175,000 00
Corporation of Georgetown, - - - - -	43,750 00
	<hr/> 262,750 00
Cash—In banks, - - - - -	\$15,804 50
Less, requisitions drawn, but not yet paid, - - - - -	996 99
	<hr/> 14,807 51
	<hr/> 369,340 93
Deficit, - - - - -	<hr/> \$190,411 16

JOHN P. INGLE,
Clerk C. & O. C. Co.

OFFICE OF THE CHESAPEAKE AND OHIO CANAL COMPANY, }
WASHINGTON, June 1, 1835. }

Estimated amount of Tolls which have accrued on the Chesapeake and Ohio Canal, from the 1st June, 1834, to 1st June, 1835.

Descending trade, - - - - -	\$19,000 00
Ascending trade, - - - - -	5,050 00
	<hr/> \$24,050 00
Aggregate, - - - - -	<hr/> \$24,050 00

The returns not having yet been received from the distant collectors, the above is given as the "estimated" amount of tolls for the past year; it is very near the true amount.

JOHN P. INGLE,
Clerk C. & O. C. Co.

OFFICE OF THE CHESAPEAKE AND OHIO CANAL COMPANY, }
WASHINGTON, June 1, 1835. }

AN ACT to provide for the completion of the Chesapeake and Ohio Canal to Cumberland; and for the completion of the Baltimore and Susquehanna Railroad to the borough of York, in the State of Pennsylvania.

SECTION 1. *Be it enacted by the General Assembly of Maryland*, That, so soon as the Chesapeake and Ohio Canal Company, in a general meeting of the stockholders thereof, shall have approved, assented, and agreed to the several provisions of this act, so far as the same is applicable to the said company, and shall have communicated to the treasurer of the Western Shore of Maryland, their acceptance of its terms, under the corporate seal of said company, and the signatures of their president and directors; and also by preparing and depositing with said treasurer a covenant and obligation, verified in like manner, pledging the whole of the nett revenues of said company, and the whole of the water rights, lands, and other property at any time acquired by the said company, or the rents or other avails thereof, for the purpose of securing to this State, in the manner hereinafter provided, the payment of the interest and principal of the loan which shall be made to said company in pursuance of this act, the said treasurer shall be, and he is hereby, authorized and directed to advertise, in the cities of Baltimore, Philadelphia, New York, and Boston, for at least three successive weeks, in two newspapers published daily in said cities respectively, for proposals to purchase stock of this State, to be redeemable at any time after the year eighteen hundred and seventy, and to bear interest at the rate of six per centum per annum, payable quarterly on the first day of the months of January, April, July, and October, in each year, at the loan office of this State, in the city of Baltimore; and, after the time limited in said advertisements for receiving such proposals shall have elapsed, the said treasurer may and shall dispose of so much of said stocks as may be necessary for the objects of this act, in reference to the Chesapeake and Ohio Canal Company, for the highest price that may have been or shall be offered for the same; provided that such price shall not be less than fifteen per centum above the par of said stock.

SEC. 2. *And be it enacted*, That the certificates of said stock, or, in lieu thereof, the bonds of the State of Maryland, shall be issued from time to time by the said treasurer, or by the commissioner of loans of this State, as the said treasurer shall direct, and as the same shall be required for the purposes of said company, and for such amount, in the aggregate, as shall be necessary to complete said canal to Cumberland, not exceeding in all two millions of dollars.

SEC. 3. *And be it enacted*, That the excess or advance which the said treasurer shall obtain above the par or sum of the certificates of said stock or bonds, with all the interest that may accrue thereon, shall form and be set apart as a sinking fund, for the payment of the interest and the redemption of the principal of the debt of this State, created or contracted under the second section of this act.

SEC. 4. *And be it enacted*, That the said treasurer shall be, and he is hereby, authorized and directed to pay to the president and directors of said company, or to their order, from time to time, out of the money which he shall receive from the purchaser or purchasers of said stock, the sum of the certificates or bonds that he may issue in pursuance of the second section of this act, and as soon as may be after said money shall be received by him; and he shall take from the said president and directors appropriate acknowledgments of the payment of said money, and the obligation of said company, conditioned for the payment of the interest that shall accrue thereon quarterly, and in advance, at least ten days previous to the first day of the several months aforementioned, at the rate of six per centum per annum, to the said treasurer, or to the commissioner of loans of this State, as the said treasurer may, from time to time, direct; and also for the payment of the aggregate sum of the principal of said certificates or bonds, at least one month before the day on which they shall, respectively, become or be made redeemable.

SEC. 5. *And be it enacted*, That, for the purpose of providing a fund on the part of said company to secure the final payment of the debt which it may owe the State for money that may be loaned to it in pursuance of this act, the said company shall also stipulate, in the aforementioned covenant and obligation, for the payment to the said treasurer of the whole of its nett revenues, and the proceeds of the sales or leases of the whole of the property hitherto or hereafter to be acquired by it, as the same shall be, from time to time, sold or leased, until he shall have received a sum in his judgment and opinion sufficient to constitute a sinking fund adequate and ample to pay off the principal of the said debt, when and as the same shall become payable, over and above the payment of the interest thereon, hereinbefore provided for.

SEC. 6. *And be it enacted*, That the said company shall also stipulate in the aforesaid covenant and obligation, that its subscription books shall not be opened until one year shall have elapsed after the completion of the said canal, nor until two months shall have elapsed after the end of the first session of the General Assembly of Maryland that shall convene after the expiration of the said twelve months, without the consent of the said General Assembly first had and obtained; and that this State, at any time before the expiration of the term or time so limited, may and shall be entitled and allowed to subscribe, at the par value thereof, for as many shares of the capital stock of said company now unsubscribed, as may be necessary to pay the debt which the said company shall owe this State, or for any less number of shares of said stock now unsubscribed, at the par value as aforesaid, in payment of the whole or any part of the said debt.

SEC. 7. *And be it enacted*, That in case this State shall subscribe for the said shares of said capital stock, or any part thereof, so much of the sinking fund which shall have been created by the company, conformably to the fifth section of this act, as will amount to the par of as many of the said shares as the State shall subscribe for and receive, shall be released and forthwith paid over to the president and directors of said company, or to their order, by the said treasurer.

SEC. 8. *And be it enacted*, That whenever a subscription for capital stock of the said company shall have been made on behalf of the State of Maryland, under the right hereinbefore reserved and stipulated for, or if such subscription shall not be made, then on the first day of January, in the year eighteen hundred and seventy-one, so much of the sinking fund last mentioned, as may, in the latter event, exceed the loan which shall have been made to said company under the authority of this act, and the interest which may have accrued thereon and be then unpaid, and in the former case, so much of said sinking fund as shall exceed the amount due by the said company on the said loan, deducting the amount of the stock subscribed for, shall enure to the benefit of said company, and be paid to the president and directors thereof, or their order, by the said treasurer.

[Sections 9, 10, 11, 12, 13, 14, 15, 16, and 18, have no relation to the canal, or the canal company, and are, therefore, here omitted.]

SEC. 17. *And be it enacted*, That if any sum or sums of money which shall be loaned to the Chesapeake and Ohio Canal Company, or the said Baltimore and Susquehanna Railroad Company, under the authority of this act, or any part thereof, shall be, by the allowance, authority, or connivance of the president or directors of either of said companies, or any of them, applied to any use or purpose not within the proper scope, meaning, or authority of this act, or of their charters of incorporation, the person or persons so allowing, authorizing, or conniving at the misapplication of the funds loaned by this State, shall be held liable, jointly or severally, in their individual capacity, at any time, to pay and refund to the said State the amount thus improperly applied or expended.

SEC. 19. *And be it enacted*, That before any payment, under the authority of this act, shall be made to the Chesapeake and Ohio Canal Company, or

to the said Baltimore and Susquehanna Railroad Company, they shall respectively stipulate and agree in general meeting of their stockholders, and shall deposit with the said treasurer authentic evidence that they have stipulated and agreed that the tariff or rates of tolls and prices of transportation hitherto established by them respectively, and now in force, shall be extended over their respective works as they shall be further completed and brought into use; and shall be uniform throughout; and that, until the whole of the debt which shall be due by them respectively for money loaned under and by authority of this act, shall be paid, with the interest thereon, to the State of Maryland, the said tariff or rates of tolls and prices, nor any of them, shall be reduced without the consent of the General Assembly of Maryland to such reduction; and also that they will respectively, once in every three months, to wit, quarterly, until their respective works shall be completed as herein provided for, cause to be made out and forwarded to the said treasurer, authenticated by the oath of the proper engineers, clerks, or other officers, tabular statements or reports, showing the quantity and character of the work done; contrasted with that remaining to be executed, and showing the progress made, also full and particular accounts of money expended and debts incurred, and of income and revenue, for the information of the authorities of this State.

SEC. 20. *And be it enacted*, That in case this State shall subscribe for shares of the capital stock of the aforesaid Chesapeake and Ohio Canal Company, in virtue of the right mentioned in the sixth section of this act, the increase of the sinking fund mentioned in the third section thereof, after the capital of said fund shall be equal in amount to the debt of this State, created or contracted in aid of said company in pursuance of this act, with the excess of the dividends on said shares above the interest on their par value, and after the payment of the principal of the aforementioned debt of this State, then the whole of the dividends on said shares shall be applied to the support of common schools throughout this State, and be distributed according to the ratio prescribed in and by resolution number forty-seven, passed at December session, 1833; and that, in case this State shall not subscribe for any shares of said capital stock in virtue of said right, so soon as the said company shall have provided a sufficient sinking fund to pay their debt to this State, the fund mentioned in the third section of this act, or the interest thereon, shall be applied to the support of said schools, and be divided according to the ratio aforesaid. *And be it further enacted*, That, so soon as the Baltimore and Susquehanna Railroad Company shall have provided a sufficient sinking fund to pay their debt to this State, the fund mentioned in the twelfth section of this act, or the interest thereon, shall also be applied to the support of said schools, and be divided according to the ratio aforesaid; and that, in case the said road shall be purchased by or become forfeit to this State, so soon as the said fund shall be deemed adequate and ample by the treasurer aforesaid to discharge the debt created in aid of said company, and in payment for said road and its appurtenances, the nett revenue thereafter derived from said road by this State shall be applied to the support of said schools, and divided according to the ratio aforesaid.

BY THE HOUSE OF DELEGATES, }
March 19, 1835. }

Whereas it is represented to the General Assembly of Maryland, that the tariff or rate of tolls heretofore established by the Chesapeake and Ohio Canal Company, and the Baltimore and Susquehanna Railroad Company, were originally intended to be temporary, and are adapted only to the present unfinished condition of these works, and require immediate alteration for the advancement of trade, the good of the public, and the augmentation of the revenue: Therefore, *Resolved by the General Assembly of Maryland*, That the consent of this General Assembly is hereby given to such alterations or regu-

lations of the tolls charged by said companies respectively, as the president and directors thereof shall, from time to time, propose: provided the same shall be sanctioned and approved by a majority of the commissioners appointed to represent the State in the said companies, or other joint stock companies: *And provided also*, That nothing herein contained shall be so construed as to authorize said companies to make any discrimination in the toll upon manufactured and unmanufactured grain: *And provided also*, That nothing herein contained shall be so construed as to authorize said companies to receive the toll beyond the sum allowed in their original charters.

We certify that the foregoing is a true copy of the resolution "regulating the tolls of the Chesapeake and Ohio Canal Company, and of the Susquehanna Railroad Company," which was assented to by the General Assembly of Maryland at December session, 1834.

Given under our hands this 19th day of March, 1835.

GEORGE G. BREWER,
Clerk House of Delegates of Maryland.

JOSEPH H. NICHOLSON,
Clerk of the Senate of Maryland.

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TENTH

ANNUAL REPORT

OF THE

PRESIDENT AND DIRECTORS

OF THE

CHESAPEAKE AND OHIO CANAL COMPANY,

TO

THE STOCKHOLDERS:

MADE JUNE 4, 1838.

WASHINGTON:

PRINTED BY GALES & SEATON.

1838.

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REPORT.

At no period since the organization of the Chesapeake and Ohio Canal Company have occurrences transpired so vitally involving its interests as during the past year; nor has the board ever been called on for the exercise of more energy and fortitude, encompassed as it has been by dangers which could not be anticipated, and by pecuniary embarrassments so pressing, as to have threatened for several months the suspension of the works on the entire line, and the dispersion of all the laborers. But those hours of despondency and trial have, we trust, passed by, and we now have the pleasure of offering our congratulations to the stockholders on the brighter prospects which again cheer and animate us in our onward course.

Although the measures agitated at Annapolis during the late session of the Legislature, for a time, struck a death-blow at the credit of the company, and have seriously retarded the prosecution of the canal, yet we are flattered with the belief that permanent benefits will result eventually to the cause of internal improvements in the State of Maryland, from the discussions which took place, and the final action of the Legislature on the subject. She has reiterated her fixed purpose of adhering to the policy of prosecuting to completion her great works of internal improvement. She has sought and obtained from this company all the information she desired in regard to the progress of its works, the sufficiency of its means for present operations, and its probable future wants; and, moreover, has adopted measures in reference to her own liabilities, which place her credit on as firm a basis as that of any State in the Union.

It is not our purpose to go at large into a history of events, which are of such recent date, and excited so much interest as not to be readily forgotten; yet it is proper to refer briefly to them, from their connexion with and influence on the operations of the company. We, also, for the information of the stockholders, append to this report the proceedings had before the Committee of Ways and Means of the House of Delegates of Maryland, of which but few copies having been published for the use of the members, it is presumed the stockholders have not seen them. Their attention is invited not only to the interrogatories propounded by the committee to the President of the company, with his answers to the same, but also to the statements submitted by Charles B. Fisk, Esq., chief engineer, in ref-

erence to the several estimates which had been previously made of the cost of the canal from dam No. 5, eight miles above Williamsport, to Cumberland, and also of the probable cost of completing the work between those points, by adopting existing prices of labor and provisions. This information was elicited in compliance with the request of the chairman of the Committee of Ways and Means, contained in the following extract from a letter addressed by him to the President of the company :

Extract of a letter from T. S. Alexander, Esq., to G. C. Washington, Esq., President Chesapeake and Ohio Canal Company.

Our inquiry into the condition of your company would be greatly facilitated by the preparation, under your direction, of a tabular statement or comparative view of the several estimates which have been made at various times of the cost of constructing the several sections of your work, and of the actual cost of construction, so far as it has been completed, and of the cost or price contracted to be paid for constructing the unfinished portions of your work. The committee desire to test the value of the several estimates which have been from time to time prepared by your authority, or adopted by you, in order that they may form some estimate of the probable cost of completing the canal to Cumberland.

Respectfully, yours,

TH. S. ALEXANDER.

The information given by the engineer is highly interesting, in reference to the particular inquiries on the part of the committee; and his views on other subjects submitted to its consideration will be found important and instructive.

As the State of Maryland holds a larger interest than any other party to the charter of the Chesapeake and Ohio Canal Company, we have deemed it incumbent on us (though not so required by law) to keep her Government apprized of the progress and prospects of the company; and, with that view, the President did, at the last and preceding sessions of the Legislature, address communications to the Executive of the State, which were by him submitted to both Houses.

The latter communication having been made since the last annual meeting of the stockholders, it is proper that it should be laid before them; and as it contains important information in regard to the prosecution of the canal to that date, (23d December, 1837,) we shall, to avoid unnecessary prolixity and repetition, adopt it as part of our report, giving, in continuation, a statement of such occurrences as have subsequently transpired.

OFFICE OF THE CHESAPEAKE AND OHIO CANAL CO.,

Washington, December 23, 1837.

SIR: The last annual report of the president and directors of the Chesapeake and Ohio Canal Company was made to the stockholders,

in general meeting, on the 12th of June last. I had the honor of transmitting, at that time, a copy to your excellency; but, as the Legislature was not then in session, it has not been officially communicated to that honorable body. Although not required by any existing law to render any other than quarterly tabular statements to the treasurer, yet, from a high sense of our obligations to the State and respect for its Government, we deem it incumbent on us to anticipate the wishes of both, by furnishing a statement, showing the progress of the work under our direction since the date of that report; which we request your excellency to present to the Legislature, in connexion with this letter. That report gives all the information which could be desired in relation to the state of the works and the character of their construction, between dam No. 5, which is eight miles above Williamsport, and dam No. 6, which is near to the mouth of Great Cacapon river, a distance of twenty-seven and a half miles; as, also, of the improvements then in progress between Georgetown and Williamsport. Wishing to avoid unnecessary prolixity, we beg leave to refer you to said report, and to the communication made to your excellency by the president of this company at the last session of the Legislature.

As no breaches of any consequence have occurred on the line, and as the embankments are becoming more solid every day, we have reason to believe such accidents will be of rare occurrence, and that the cost of repairs will consequently decrease every year. Indeed, it is one of the highest recommendations of canals, that, unlike most works of art, their strength increases with their age. The materials of which this canal is constructed are imperishable, with the exception of the lock-gates and a few pivot-bridges; and, when it is completed, the annual expense of repairs will be inconsiderable, compared with its magnitude and cost, and will abduct but a small amount from its vast receipts.

For the security of persons and horses travelling the tow-path, permanent fences have been erected at the dangerous passes and high walls below the Great Falls. The lift-locks at Edward's Ferry, for the accommodation and reception into the canal of the Virginia trade, are completed and in operation.

By the act of June, 1836, the Chesapeake and Ohio Canal Company was, on certain conditions, required to release the Baltimore and Ohio Railroad Company from certain obligations, created by a previous law, that required said Railroad Company to erect and keep in repair, at specified places, a close fence of boards or other materials. In compliance with that act, said release has been given, and arrangements mutually satisfactory to the companies have been made: and, for the safety of persons and property using the canal, a strong fence has been constructed on the tow-path next the river, to afford the best protection which, under the circumstances, could be devised.

The tow-path on the pool of dam No. 4 was under contract when the last annual report was made, and is now nearly finished, and will soon afford the requisite facility for navigating with safety that ex-

tensive sheet of water. Additional security has been given to the works at points where any weakness was indicated. These comprise the chief improvements on the line of the canal from Georgetown to dam No. 5, the whole being in a state of good repair.

Of the twenty-seven and a half miles between dam No. 5 and the Cacapon river, a large proportion of the sections and masonry is completed, and the final estimates paid. The remainder of the work is in rapid progress ; and we confidently believe that this important addition will be opened for navigation in the month of May. For a full description of this work, and of the plan of constructing the embankments and masonry, we again refer you to the aforesaid annual report ; and will here only add, that the execution of the whole is highly creditable to the skilful and talented engineer, Mr. Charles B. Fisk, who planned, and his assistants, who superintended the work, which will compare favorably with the best works in this country or Europe.

Independent of the intrinsic difficulties of construction, other causes, not within the control of the company, have occurred to retard the completion of this work. Of these, your excellency was apprized by the aforementioned communication from the president of this company. (Vide page 5 of printed form.)

Until the recent embarrassments of the country had forced the suspension of many of the works of internal improvement, and the consequent dismissal of their laborers, our contractors found it impossible to increase their effective force, even at the high prices which they offered ; but, within the last few months, a sensible change took place, not so materially affecting the price of labor as the facility of obtaining it ; and the amount of work done within this period has maintained a corresponding ratio.

Deeply impressed with the necessity of an early completion of the canal to Cumberland, on which event so many important interests are dependent, the president and directors, so soon as they felt authorized by the actual subscription, on the part of the State, of three millions of dollars to the stock of the company, and the compliance on their part with the requisitions of the law, proceeded forthwith to make the necessary arrangements to place the line from the Great Cacapon river to Cumberland under contract. And as soon as the revised examinations and estimates could be made by the engineers, and the prospect of obtaining sufficient labor, without abstracting it from their works then in progress, could be relied on, the board entered into contracts for all the heaviest sections and masonry between those points. These contracts have been made with responsible and generally experienced men, who are commencing their operations with great spirit. The last annual report (vide page 7) presents a statement of the operations, up to its date, at the tunnel and deep-cut near Oldtown, and of the policy which induced the board to commence in advance these heavy parts of their work. And if this course had not been adopted, it is now apparent that they would be at least one year behind the rest of the line in their completion ;

whereas it is at present the decided opinion of the chief engineer and board that the entire canal from Cacapon to Cumberland will be opened simultaneously by the close of the year 1839, or, at the farthest, in time for the spring trade of 1840.

The commissioner of the company, Major George Bender, who has discharged the various and highly responsible duties of his office with distinguished ability and zeal, aided by intelligent counsel, has happily succeeded in obtaining from a majority of the landholders the right of way and proper conveyances. When such arrangements could not be effected by private contract, we have had to resort to inquisitions by juries, and regret to say that, in most of these cases, the awards for damages have been heavy, and in some instances so excessive as to force us to appeal.

There has been no material change in the receipts of the company from tolls since the last communication of the president to your excellency; their increase being as yet chiefly dependent on agricultural products, which for the last two years have failed to a lamentable degree throughout the whole extent of country bordering on the Potomac and its tributaries. These, and the various other articles for transportation on the canal, are considered as only auxiliary to the main source of revenue to be derived from the mineral regions of Maryland and Virginia. But the opening of the canal in the spring to Cacapon will, no doubt, add greatly to its resources, as at Hancock it comes in contact with the great Western road to Wheeling and Pittsburg; and it may, therefore, be reasonably believed that considerable portions of the products of the valley of the Ohio, which now pass down that river and the Mississippi, will seek the nearer markets of the Atlantic, and be transported to Hancock by wagons, and thence by a cheaper conveyance on the canal. Besides, the line of the canal to be opened in the spring, passes the anthracite coal region of Virginia, to which it will be connected by a short railroad, a few miles below Hancock. A coal company, incorporated by Virginia, has been actively engaged in opening these mines. Several veins have been found of very superior quality, and promising an abundant supply; and should the expectations of that company be realized, the day is not distant when from this source a vast accession to the revenue of the canal will be derived.

But what, we respectfully ask, can limit the coal trade on the Chesapeake and Ohio Canal, when finished to Cumberland, but its capacity to convey that mineral? In quantity it is inexhaustible, and by the analysis of the most skilful chemists it is found to be of richer quality than any coal with which it has been compared, either of this country or England. Its excellence will surely give it a preference, as it can be supplied not only as cheaply, but we believe much cheaper than from any other quarter. And it is a notorious fact, that, notwithstanding the great annual increase in the quantity of coal brought into market, there is no diminution in price, but, on the contrary, an advance; the supply not keeping pace with the demand for consumption. We are informed, from authentic reports, that 1,700,000 tons of coal are annually transported on the Monk

land Canal to the town of Glasgow, in Scotland ; and from the capacity of the Chesapeake and Ohio Canal, four times that quantity could be conveyed on this. The population of that town but little exceeds that of Baltimore and the District cities, and the amount of coal transported on that canal, if conveyed on ours, would give an interest on its cost of eighteen per cent. But we do not conceive that the market for it is to be confined to the cities of Maryland and the District of Columbia, but that it will be shipped to every Atlantic State. The fact cannot be controverted, that the most profitable investments which have been made in works of internal improvement of any extent, either in this country or in Europe, are in canals leading to mineral regions. It is not reasonable to suppose that the Chesapeake and Ohio Canal is to stand as a solitary exception, for this would be a violent presumption, in the face of experience and facts. And we would respectfully invite the attention of your excellency and the honorable members of the Legislature to the probable extent and value of our coal trade, as set forth in the abstracts made from the report of George W. Hughes, Esq., United States civil engineer, published in our last annual report. (Vide pages 11, 12, 13.)

Maryland, though in extent of territory inferior to many of her sister States, yet in geographical position and natural resources may proudly compare even with the "empire State." She holds within her bosom that which now lies almost useless, but will soon be made worth more than mines of gold, by her rulers adhering firmly to the liberal and enlightened policy which has characterized her measures ; and we are happy in the belief that its consummation is now near at hand.

If the State should, as she has reserved the right, elect to vest her loan to the company of two millions of dollars in its stock, after the completion of the canal to Cumberland, she will then be a stockholder to the amount of \$5,625,000 ; the dividends on which we firmly believe will yield to her an annual income that will not only discharge all the interest she may have to pay, but bear all the expenses of her Government. We would not attempt to abuse the intelligence of the State or of her representatives by the expression of any opinions that we did not conscientiously and deliberately entertain. And the opinion that we have expressed has been formed after much reflection and an intimate acquaintance with the resources to be developed on the completion of the canal to Cumberland.

The receipts and disbursements of this company since the general suspension of specie payments occurred have, of course, like those of the Government and people of Maryland, been made in *current money* ; in that currency we have *punctually* paid to the treasurer of the Western shore of Maryland the interest that has accrued upon two millions of dollars, the sum of the State stock that was issued in aid of our enterprise, as a loan, with the right reserved to the State, at its option, to convert the same into a subscription. Our attention was not called, at the times of payment, to the necessity or propriety of our handing the said interest to the treasurer in specie or its equiva-

lent, nor until very lately, when we were informed by the commissioners appointed to negotiate further loans for this State, that unless the interest on the existing debt of Maryland shall be discharged in specie, or its equivalent, the deserved high credit of this State will be impaired. But now it seems fit that we should volunteer the remark, that, with reference to said subject, this company will cheerfully satisfy any requisition which that officer or the Legislature of Maryland may deem necessary or proper.

Many difficulties have encompassed us in the prosecution of this great work, which we have encountered with untiring zeal and fortitude, being sustained, as we have at all times been, by the just hope that we would be cheered in our onward course by the approbation of the Legislature and the confidence of the public.

I have the honor to be, most respectfully, your obedient servant,
 GEORGE C. WASHINGTON,

President Chesapeake and Ohio Canal Company.

To His Excellency THOMAS W. VEAZEY.

For some time previous to the above communication, the available means of the company had become exhausted in the prosecution of the heavy line of canal on the twenty-eight miles between dams Nos. 5 and 6, and in the payment of debts of the company, including interest to the State. We had been compelled, also, to resort to temporary loans from banks, obtained with difficulty, and to issue the notes of the company, for the redemption of which it was necessary to provide funds.

The act authorizing the subscription of \$3,000,000 to the stock of the company, had passed as far back as June, 1836; delays had occurred in the appointment of the commissioners to negotiate the State bonds issued to meet her subscription, as well as in their departure for Europe and return to this country; and although the company had entered into a provisional contract for the purchase of the State bonds to the amount of her subscription, yet they could in nowise be made available for present relief.

Under all the embarrassments incident to this state of our finances, the board used every exertion to press forward the works below the Cacapon, as well as those at the tunnel and Oldtown. Anxious to hasten the completion of the remainder of the line, and to meet public expectation, we advertised to let the heaviest sections and masonry to Cumberland, and in September entered into contracts for the sections and aqueducts, being the works requiring the longest time to execute.

We were emboldened to take this step, from a firm reliance on the good faith of the State in regard to her subscription; and having full confidence in the validity of our contract with the commissioners, we believed, in the event of their failing to negotiate the sale of the bonds elsewhere, that they would soon come into our possession, and that we should be able to raise money on their hypothecation to meet present exigencies, and until a more favorable time for their sale might arrive. The contract with the commissioners was not,

however, finally consummated until a few days before the meeting of the Legislature; and in the mean time the demands on the company and its difficulties had been greatly augmented, by the additional contracts on the upper line. Still, neither the confidence of the contractors in the company nor their exertions were relaxed, believing, as they did, that we would, in a short time, realize some portion of the State's subscription.

Under these circumstances, and at an early day after the meeting of the Legislature, the House of Delegates instructed its Committee of Ways and Means to inquire "whether the State is bound in law or equity by any subscription on her behalf, to the capital stock of any of the internal improvement companies mentioned in the act of the May session, 1836, ch. 395, made under color of the provisions thereof? And whether this General Assembly can lawfully repeal or modify the provisions of that act?"

The same committee was further instructed to inquire into the validity of the contracts entered into between the commissioners and the companies, for the sale of the State bonds by the former to the latter, and whether the same should not be annulled.

The consternation which this inquiry was calculated to produce, may well be imagined. The company had entered into contracts covering nearly the whole line to Cumberland, with the exception of alluvial sections, and exceeding in amount two millions of dollars. The line below the Cacapon was then about two-thirds finished, and dam No. 6, near its mouth, raised to half its intended height, and presenting an impassable barrier to all the trade above it. The contractors naturally became alarmed and distrustful, and declined entering into heavy engagements for labor. The consequence was, that laborers, in large numbers, when dismissed on the works as they were finished below the Cacapon, would seek employment elsewhere, and among them were many stone-cutters and masons, a class of mechanics not easily to be replaced. The discussions in the Legislature on the subjects of inquiry were very protracted, and its final action not had until near the close of the session, when both the subscription and contract were confirmed. During the whole of this time the State bonds were tied up, the credit of the company prostrate, and indeed we were in daily expectation of having to suspend, from necessity, the whole work, though determined to avert so deplorable an event as long as possible. It must, however, have occurred but for the constancy of the contractors and our success in obtaining temporary loans from the District banks, and a small loan in addition from two banks of Baltimore.

Operations so extended as ours, to be prosecuted with despatch and vigor, require not only the supply of ample means, but that they should be at all times available; and being debarred for months together from the application of funds designed for our use, may well account for any apparent delay in the prosecution of the works.

The canal has been urged on with all possible despatch, with all the means at our control, and often when largely in anticipation of

them ; but, from the causes recited, under great disadvantages, and necessarily involving additional cost, and the delay of months in its expected completion.

The fiscal arrangements of the company, since the adjournment of the Legislature, have engrossed much of the time of the President and Directors. An immediate resort to temporary loans on a pledge of the State bonds, (at length placed in the control of the company,) became indispensable to meet existing engagements, and accordingly loans were effected with the banks of Baltimore ; but, as these sources of relief were but temporary and precarious, we deemed it advisable to advertise for sale, in this country, the certificates of debt of the State of Maryland for \$1,500,000, and to send a like amount to an agent in London, to be disposed of in the European markets, either by sale or hypothecation. On the 15th of May, the day fixed for receiving proposals in this country, no offer was made which the board felt justified in accepting. The accounts received from Europe of the state of the money market induces the belief that favorable arrangements will be made of the bonds which have been sent out, of which we expect to be advised in the course of the present month. The course of the board in regard to the bonds retained in this country, will be influenced, it is presumed, by the information to be received from the agent of the company, George Peabody, Esq., one of the commissioners of Maryland, resident in London, a gentleman of high character and intelligence.

By resolution of the late Legislature of Maryland, this company is required, out of any sales or hypothecations of the State bonds, to pay over to the treasurer of the State the amount of any requisitions made through him, by the Eastern Shore and the Annapolis and Elkridge Railroad Companies; the same to be refunded to us by the treasurer from the sales of the certificates of debt of the State, created for their use, and now in the hands of the commissioners of the State. In compliance with this resolution, and of requisitions made on us, we have paid to the treasurer of the State for the Eastern Shore Railroad Company \$10,000, and for the Annapolis and Elkridge Railroad Company \$15,000. As it is presumed that no difficulty could exist in a negotiation between those companies and the commissioners of the State for the purchase of the bonds designed for their use, it is hoped that they will adopt that course, and relieve us from the obligation to supply their wants, when all our means are required for the active prosecution of the heavy works we have under construction.

The Legislature, at the late session, directed her treasurer to pay to the holders of her stocks, or certificates of debt, all the interest which had accrued thereon since the suspension of specie payments, or which may hereafter accrue, in specie or its equivalent ; and has required the same terms of this company, on the loan made to it of \$2,000,000. We have complied, and paid over to the treasurer of the State the amount ascertained to have been the difference between specie and the currency of the country at the several periods at which our payments of interest were made.

It was confidently believed, when the communication to the Executive of Maryland (above recited) was made, that the canal from dam No. 5 to the Cacapon would be opened for navigation by the 1st of June; but it has been delayed from the causes above stated, and over which it must be evident the board could have no control: in addition to which, the river has continued so high during the present spring, as to render the completion of the dam near Cacapon impracticable; although upon its subsiding, a few weeks only will be necessary to accomplish that object. Occurrences, too, of an embarrassing nature with the contractor and laborers at Prather's neck, have temporarily suspended the completion of the work at that point; but arrangements are in progress by which it is believed these difficulties will be adjusted satisfactorily, and the work be speedily recommenced. This line will be opened in the course of the summer. The intervention of a military force has been required on two occasions. In the one instance, to suppress a riot on the line at Oldtown, to which place a large body of Irish laborers from the tunnel had repaired, with the view of attacking their countrymen engaged on the works at that point; no lives were lost, but some private property was destroyed. Several of the ring-leaders were arrested and committed to jail at Cumberland for trial; others implicated were dismissed from the works.

In the latter instance, the military was called out as a measure of precaution, and for the protection of the works at Prather's neck against apprehended violence. We have invited the attention of the Executive of Maryland to the expediency of authorizing the commanding officer of that military division of the State to embody a corps which can act promptly and efficiently in suppressing any future riots, and have no doubt but that the course recommended will receive his favorable consideration, and be directed accordingly.

The works at the tunnel and deep-cut at Oldtown are progressing rapidly, and we have every assurance that they will be finished as soon as the other works between Cacapon and Cumberland.

The character of all these works having been fully described in the last annual report, we will not trespass on your time by a repetition of the statements then made. We still believe, notwithstanding the many unforeseen delays and difficulties which have beset us, that the entire line to Cumberland will be finished in 1840. Improvements have been in gradual progress on the line between the District of Columbia and dam No. 5, above Williamsport. The tow-path above dam No. 4 has been completed, and affords every requisite facility for navigating the slack-water pool at that point. But few interruptions to the navigation have occurred during the past year from breaches. The principal occurrence of the kind was at the Catoctin aqueduct, one of the wings of which gave way and occasioned a breach. A temporary trunk was thrown over it, and the repair is in progress. A new organization of the engineer corps has been made, which it is believed will add greatly to its efficiency.

The returns from the distant collectors for the quarter ending the 31st of May have not been received; but from those in the office we

are satisfied that the receipts from tolls for the year will not fall short of \$30,000, being an increase of about \$6,000 over the preceding year.

That the receipts from this source have not been larger, is to be attributed to the well-known fact of the almost total failure of the grain crops, for the last two years, in the rich agricultural country bordering on the Potomac and its tributaries.

The prospect of a considerable increase of revenue from tolls for the present year is highly encouraging. The grain crops are unusually fine, and promise an abundant harvest. In anticipation of the demands for transportation, the means for meeting it has been greatly enlarged in the number and size of the boats navigating the canal.

Many new sources of trade, heretofore unknown or inactive, are in progress of development. The completion of the canal to Cacapon will, it is believed, induce the shipment of a considerable quantity of coal from Cumberland to this District in the fall, when the waters of the upper Potomac admit of navigation; and we may reasonably calculate on a transportation trade by wagons between Wheeling and Hancock, to be transferred at the latter place to conveyance by the canal.

The usual tabular statements of the treasurer of the company are appended to this report.

Signed in behalf of the President and Directors.

G. C. WASHINGTON,

President of the Chesapeake and Ohio Canal Company.
WASHINGTON, June 4, 1838.

and Ohio Canal Company, and also the Receipts and Disbursements in the 31st May, 1838.

Date.		Disbursem'ts in the year.	Aggregate expenditure.
1838.			
May 31,	By Corporation of Washington, -	-	175,000 00
	By Corporation of Georgetown, -	-	41,400 00
	By contingent expenses, -	3,700 00	38,370 21
	By acquisition of lands, -	32,907 50	343,014 69
	By western section, -	-	4,037 08
	By construction of the canal, -	1,007,790 11	5,932,547 90
	By engineer department, -	33,000 00	216,670 23
	By interest, -	150,297 96	298,717 89
	By law expenses, -	892 94	22,277 08
	By Potomac Company—General account, -	-	373 65
	Unclaimed dividends, -	83 25	88 80
	Tolls account, -	2,822 04	14,337 09
	By tolls account, -	-	1,222 38
	By pay of lock-keepers, -	3,910 24	26,089 04
	By pay of officers, -	10,504 50	76,602 02
	By postages, -	113 01	907 92
	By printing, -	751 75	8,769 26
	By stationery, -	145 88	2,671 37
		1,246,919 18	7,203,096 61
	By balances to the credit of the Chesapeake and Ohio Canal Company in—		
	Bank of Washington, -	8,630 55	
	Patriotic Bank, -	253 83	
	Bank of the Metropolis, -	2,126 31	
	Farmers and Mechanics' Bank, Georgetown, -	-	
	Bank of Potomac, Alexandria, -	3,709 77	
	Bank of Baltimore, -	3,137 64	
	Merchants' Bank of Baltimore, -	1,685 00	
	Union Bank of Baltimore, -	98,653 41	
	Western Bank of Baltimore, -	908 33	
	Cumberland Bank of Alleghany, -	755 20	
	Bank of the Valley, Charlestown, -	170 88	
	Bank of the Valley, Leesburg, -	12 09	
	Washington County Bank, Williamsport, -	837 97	
	State of Maryland, -	32 98	
		25,000 00	
			145,913 96
	Dollars, -	-	7,349,010 57

E. E.

TREASURER'S OFFICE, CHESAPEAKE AND OHIO CANAL COMPANY,
Washington, June 1, 1838.

ROB. BARNARD, *Treasurer.*

APPENDIX.

No. 1.

Interrogatories propounded to George C. Washington, President of the Chesapeake and Ohio Canal Company, by the Committee of Ways and Means of the House of Delegates of Maryland, with his answers to the same.

1. Are you or not the president of the Chesapeake and Ohio Canal Company; and if yea, were you not its president at the date of the contract between that company and two of the commissioners for the purchase of three millions of stock of the State, created under the provisions of the act of May, 1836, ch. 395?

2. Are you acquainted with the nature of that contract, and are you acquainted with the views of the Chesapeake and Ohio Canal Company in making that contract?

3. Have any, and what, measures been taken by said company for the sale or other disposition of the stock which it contracted for, as before stated? If yea, state what particular measures have been taken or are in contemplation for those purposes.

4. Have any expenditures been made by said company, or any contracts or engagements entered into by it, in anticipation of the proceeds of that stock, or of the avails of the State subscription to the capital stock of the company, made under the provisions of the aforesaid act? State fully and particularly all such expenditures, and the objects thereof, and also the nature or purpose of all contracts or engagements which may have been made or entered into as aforesaid.

5. Have you or not a letter addressed to you by the chairman of this committee, requesting certain statements to be made for the use of this committee? If yea, produce that letter, and exhibit the statements which you may have preferred in compliance with its requests.

Answers of George C. Washington, President of the Chesapeake and Ohio Canal Company, to the interrogatories propounded to him.

1st. I am president of the Chesapeake and Ohio Canal Company, and stood in the same relation to that company at the date of the contract between it and two of the commissioners of the State for the purchase of three millions of the stock of the State, created under the provisions of the act of May, 1836, ch. 395.

2d. I am acquainted with the nature of that contract, and with the

views of the company in entering into it. By the contract, the company agreed to purchase three millions of the stock of the State at the price fixed by law, provided the commissioners should not dispose of it at that or a higher price in Europe or elsewhere. A copy of this contract accompanied a recent communication from the commissioners to the Executive, and is now in the possession of the Legislature. The company, not doubting its power to contract for the purchase of the stock, in general meeting of the stockholders, authorized the president and directors to make an offer for the stock at the price fixed as its minimum by law. Similar proceedings were adopted by the stockholders on a former occasion, in reference to the loan by the State of \$2,000,000 to the Chesapeake and Ohio Canal Company, and \$1,000,000 to the Susquehanna Railroad Company. When the stock of the State was offered for sale to meet these objects, the canal company then bid the law price for two millions of the stock, but as a higher offer was made, did not obtain it.

In neither instance did the company make proposals for the stock with any view to speculation, but was influenced by considerations of mutual advantage to the State and company; more especially was this the case in reference to the contract with the commissioners, who deemed it their duty to offer the stock in foreign markets, and with that object visited Europe. The fact that an offer had been made to them at home on the terms of the law, and by a responsible party, was well calculated to inspire confidence in the stock abroad, and aid them in their negotiations, at the same time that the fact of the conditional contract between the company and the commissioners had the effect of sustaining its credit, and enabling it to prosecute its works with greater vigor. If the efforts of the commissioners to negotiate the sale of the stock in Europe had been crowned with success, all the desires of the company would have been gratified; and it was only in view of a possible failure abroad that it bid for the stock, deeming it a duty to be in position as purchaser, to make it available at the earliest moment, and knowing that unless funds were soon obtained the work would have to be abandoned, at a ruinous sacrifice to the State and to every other interest.

We conceived, that should profit accrue on the resale of the stock, it would be receiving additional means in aid of the canal, and a positive gain to the State in the proportion of her investments in our stock; and, on the contrary, should the law price not be realized, the deficiency would be distributed among the stockholders, the State in any event being secured in the receipt of the twenty per cent. premium.

We could not anticipate that by possibility a question might arise as to the validity of our contract, or involving a doubt as to the moral or legal obligations of the State in virtue of her subscription to the respective companies. We took it for granted that all the requisitions of the law had been fully complied with by all the parties concerned, and that the Treasurer of the State had fully satisfied

himself of that fact before, in the discharge of official duty, he subscribed for the three millions to the joint stock of the Chesapeake and Ohio Canal Company.

On the part of the Chesapeake and Ohio Canal Company, every obligation imposed on it by the law, as precedent to the subscription on the part of the State, was strictly fulfilled. We were required to surrender rights secured to us by compact with the Baltimore and Ohio Railroad Company, and ratified by the General Assembly, which it had not the power to annul, and by which the Railroad Company was restricted from constructing its road in the valley of the Potomac beyond Harper's Ferry until after the completion of the canal to Cumberland, and was further required to erect and keep in repair, at certain points, a fence of boards or other materials within or upon the margin of said road next the canal. These companies were further required to agree to certain arrangements in the joint construction of their respective works when they might come into contact at difficult passes.

In compliance with the conditions thus prescribed by law, the two companies entered into arrangements mutually satisfactory, embracing all these objects of the law. The Canal agreed to receive from the Railroad Company as an equivalent for the fence, a sum of money agreed on by their respective engineers, and which has been paid over by said company, and expended by us in such protections as were deemed necessary for the security of our trade; and there no longer exists an impediment to the extension of the railroad from Harper's Ferry to the West.

Our requisitions have been made on the Treasurer agreeably to law, giving him six months' notice, for the amount of subscription to our company, in the proportion of \$250,000 to be paid quarterly, and the first instalment became due on the 1st of December last. Having thus shown that we have fully complied on our part with every thing required of us by the State, we rely on her good faith with unshaken confidence.

3d. The company has made no disposition of the State stock, nor has it been offered in the market at any fixed price, though some inquiries were made with the view of ascertaining its value and the prospect of raising means on its hypothecation, if found to be more advisable than a sale. During the pendency of measures in the Legislature calculated to excite distrust, and the delay in providing for the payment of the interest on the stocks of the State in specie or its equivalent, it cannot be reasonably expected that the full value which would attach to the stock under other circumstances can now be obtained. Under this state of the case, the company has suspended its action as to the present disposition of the stock.

4th. In full reliance on the subscription by the State to the stock of the company, and believing that it would be made available in time to meet its wants, we did not hesitate to enter into contracts for the construction of the canal between dam No. 6, at Cacapon, and Cumberland, with the exception of the light and alluvial sections.

The tunnel and deep-cut between those points being very difficult works, and requiring much longer time for their completion than the other portions of the line, had been placed under contract nearly two years previous to our last letting. We deemed it an imperative duty to press forward the canal with all possible vigor and despatch, in order to reach the point where we are to rely chiefly for our revenue. This is all important to the State and other parties who have invested largely in the stock of the company, and as yet received no return, and especially so to the company, which is now burdened with the interest on the loan from the State, amounting to \$120,000 per annum. Large sums have been necessarily expended on this line of the canal in its location, and the acquisition of lands through which it passes; the latter item for which the company have paid or are bound amounts to \$90,460. Considerable payments have been made or are due to contractors for work done. They are useful and respectable men, many of whom have been for years engaged in the construction of the canal, and in many instances all the means within their control have been expended in the preparations necessary for the commencement of a heavy work, and any failure on the part of the company to meet its engagements with them would effect their ruin. These contracts above dam No. 6 are upwards of seventy in number, and exceed in amount two millions and a quarter, and the contracts below that point amount to eighty-seven; in all, about one hundred and sixty.

On the faith of said subscription, the company has also issued its promissory notes to a large amount, and without the use of which we could not have progressed with the works to the present day. The circulation and credit they have obtained, are based on said subscription and on the contract for the stock.

5th. I have a letter addressed to me by the chairman of this committee, which I now present, and in compliance with the request therein made, furnish tabular statements prepared under the direction of C. B. Fisk, Esq., chief engineer of the company, with his explanations of the same, presenting a comparative view of the several estimates which have been made at various times of the cost of constructing the several sections of the work, and of the actual cost so far as it has been completed above dam No. 5, and of the cost or price contracted to be paid for constructing the unfinished portions of the work. A general abstract from the books of the treasurer, showing the receipts and expenditures of the company to the 31st of December last, is handed over to the committee, and other statements connected with this inquiry, all of which are endorsed and numbered in the following order, viz:

No. 1. Treasurer's abstract of receipts and expenditures to 1st of December, 1837.

No. 2. Statement exhibiting the cost of the Chesapeake and Ohio canal to 1st December, 1837.

No. 3. Detailed statement exhibiting the cost of the Chesapeake and Ohio canal to 1st December, 1837.

Paper marked A. Estimate of Alfred Cruger, 20th March, 1834.

B. Eighth annual report of the president and directors, to which is appended their memorial to the Legislature, in reference to the estimate, and also the estimates of Mr. Fisk and Purcell.

C. Estimate of C. B. Fisk, June 1, 1836.

D. Estimate of C. B. Fisk, December 1, 1836.

E and F. The information intended to be given by these papers is contained in the letter of C. B. Fisk to the president of the company, of this date, February 5, 1838.

G. Estimate and report of C. B. Fisk, June, 1835.

H. Report of the commissioner on acquisition of lands.

I. Report of C. B. Fisk on survey from Cacapon to South Branch, December 31, 1835.

K. Estimate of C. B. Fisk, 31st December, 1835, between the South Branch and Great Cacapon rivers.

L. Estimate of C. B. Fisk, September, 1837, of the work let that month.

M. Letter of C. B. Fisk, chief engineer, to the president of the company, giving information called for by the letter of the chairman of the committee.

Having answered the several interrogatories propounded to me by the committee, I respectfully ask leave to submit a few observations, in connexion with the subject-matter before the committee.

The early completion of the Chesapeake and Ohio canal to Cumberland, is a result to which every enlightened citizen of the State must look with deep solicitude; and never since the commencement of that great enterprise have its friends been cheered by better prospects of its early and successful termination than during the past year, notwithstanding the difficulty and embarrassments with which it has been beset; and it would be deemed a public calamity should any unfortunate circumstance arrest its vigorous prosecution.

The canal, when made to Cumberland, will develop the vast mineral wealth of that region, which of itself will furnish an ample remuneration for the cost of its construction; but when to this are added the agricultural productions of the country, the lumber, lime, &c. and also the transportation of products from the valley of the Ohio, and the returning trade to the West, which will centre at Cumberland, who can doubt its becoming a fruitful source of revenue to the State, increasing her resources and promoting the general welfare of her citizens? This consummation can only be achieved by a steady and unwavering adherence to the enlightened and liberal policy which has characterized her action towards her works of internal improvement.

We have never abandoned the hope of terminating this great work at the Ohio river, nor have we ever viewed with jealousy the prosecution of the Baltimore and Ohio railroad to that terminus. There will be business enough for both, and to spare—theirs, in the transportation of travellers and light articles of trade; and ours, in the heavier transportations. The friends of these respective works have

ceased to consider them as rivals, except in that generous sense, which looks only to the greatest amount of benefits which each is destined to impart in its respective sphere.

The railroad from Cumberland to the Ohio could not fail to attract to the markets of this State a large portion of Western trade, which now, through other avenues, finds other markets, and the canal would participate in a full share of that trade.

I should be derelict in duty to the great interests confided to my charge, in concluding these remarks without inviting the attention of the committee to the present condition of the company and of its works.

Nearly two years have elapsed since the act passed the Legislature authorizing a subscription of three millions to the stock of the company, and after all the conditions of the law had been complied with, as we supposed, and the subscription made, it was not until about the close of the last year, that the stock was placed at the disposal of the company, when, owing to causes to which I have referred in answer to the 3d interrogatory, we have been prevented from making it available. Under such circumstances we have contended with great difficulties, but have still struggled on and strained every nerve to avert the calamities with which we are threatened by a suspension of the work. By the last return of our commissioner we had upwards of three thousand laborers in the employment of our contractors. These men are dependent for their daily bread on the contractors, and if we fail to pay punctually, they consequently must. By great exertions, and the liberality of the banks of the District of Columbia, we have been enabled to meet nearly the amount of our engagements to the contractors to the 10th of the last month. On the 10th of this month their estimates again become due, and without prompt relief is afforded us, a suspension of the works on the whole line must ensue. The consequences in such event to the State, and every interest connected with us, would be deplorable in the extreme. The dispersion of our laborers and ruin of our contractors, the forfeiture of all our contracts and consequent damages, the loss to the State of her two-million loan, and of her investments in our stock, the necessity of drawing upon her treasury for \$120,000 per annum to pay the interest on two millions of her stock, which has heretofore been punctually paid by our company, are consequences which, in the event of our suspension, could not be averted. In addition to the above summary, it should be stated, that the line of nearly thirty miles below the Cacapon, to be opened for navigation in the spring, must remain unfinished; whilst the dam near the mouth of the Cacapon will present an impassable barrier to the trade of the Potomac above that point. The alarm and distrust of the contractors on the upper line, induced by this inquiry, is manifested by their declining to employ the laborers and mechanics who are discharged from the works as they are finished on the line below Cacapon. This is a very serious evil, for we have had great difficulty in procuring this labor, and its loss may materially retard the completion

of the work. I cannot, in conclusion, refrain from expressing the hope, that by prompt action on the part of the committee, and of the Legislature, the consequences we apprehend may yet be averted.

No 2.

*Letter from T. S. Alexander, Esq. to G. C. Washington, Esq.
President Chesapeake and Ohio Canal Company.*

SIR : You will receive by the messenger who delivers this, a summons requiring your attendance before the Committee of Ways and Means of the House of Delegates at Annapolis, with certain books and documents pertaining to the Chesapeake and Ohio Canal Company. As the committee, in the discharge of the duties confided to them by the House, are anxious to proceed with all possible regard for the convenience of yourself and company, I would suggest that printed copies of any reports which are called for by the subpoena, if verified by you, will be received in the place of the originals. Our inquiry into the condition of your company would be greatly facilitated by the preparation, under your direction, of a tabular statement or comparative view of the several estimates which have been made at various times, of the cost of constructing the several sections of your work, and of the actual cost of construction, so far as it has been completed, and of the cost or price contracted to be paid for constructing the unfinished portions of your work. The committee desire to test the value of the several estimates which have been from time to time prepared by your authority, or adopted by you, in order that they may form some estimate of the probable cost of completing the canal to Cumberland.

Respectfully, yours,

TH. S. ALEXANDER.

No. 3.

ANNAPOLIS, *February 5, 1838.*

SIR : In the following statements and remarks I have endeavored to comply with your directions to me to furnish, as far as in my power, the information sought for by the chairman of the Committee of Ways and Means of the House of Delegates of Maryland, in his letter to you of date January 11, 1838.

It appears to me that the views of the committee, expressed in the letter referred to, will be met by answering these two questions :

1st. What has been the *actual cost*, so far as constructed, of that portion of the canal embraced in the engineer's estimate, submitted to the Legislature in January, 1836, compared with that estimate and

such other estimates as have subsequently been submitted to the board? And

2d. What will be the cost of the work yet to be done to finish the canal to Cumberland, applying such corrections to the January 1836 estimate, as the answer to the preceding question may show to be necessary?

1. How does the *actual cost* of the work done since January, 1836, compare with the engineer's estimate of that date, and with subsequent estimates?

It is well known that the operations of the canal company during the period in question, have been mostly confined to the $27\frac{1}{2}$ miles next above dam No. 5, that being the distance to the next feeder, dam No. 6. With a very trifling exception, indeed, no work has been finished above the 6th dam. An inquiry, therefore, into the *actual cost* is necessarily limited to the $27\frac{1}{2}$ miles.

Since the "January 1836 estimate," there have been two revised estimates of these " $27\frac{1}{2}$ miles;" they had reference to the situation of the work on the 1st of June, 1836, and on the 1st of December, 1836, respectively. The originals of these two estimates, which are in very full detail, I understand will be placed in the hands of the committee.

I regret exceedingly that an equally detailed estimate of these " $27\frac{1}{2}$ miles" for the 1st of January, 1838, cannot at this moment be presented. Steps were taken by me, so soon as it was thought there would be occasion for such an estimate, to have it prepared without delay, but it is not yet completed. The greater part of the materials, however, are at hand, and will all be arranged, it is believed, in two weeks from this date.

Now that *four-fifths* of the work on these " $27\frac{1}{2}$ miles" has been done, (and of necessity nearly all of the contingent closed,) there cannot, without wilful error or gross negligence on the part of the engineer, be any material deviation from the *actual cost* in an estimate made at this time.

Sufficient has been done towards this estimate to enable me to speak with considerable confidence of the amount that will be needed for these " $27\frac{1}{2}$ miles," in addition to what has already been paid.

I must here, however, make one remark. It giving below what it is supposed will be the *actual cost* of this portion of the canal, we make no allowance for the evil consequences that may flow from the present embarrassed situation of the company's affairs. These consequences I am not prepared to estimate. Without speedy relief they are to be feared; they are to be dreaded; they may be disastrous to an extent greater than can now well be imagined by persons not acquainted with all the circumstances connected with our present situation.

I will give the several estimates of the " $27\frac{1}{2}$ miles," commencing with Mr. Cruger's of March 20, 1834.

1st. Estimate of Mr. Cruger for twenty-six and a half miles of this division, commencing half a mile above dam No. 5, and extending to the Cacapon river	-	\$642,336	20
Add for the half mile next to dam No. 5 \$44,000, for the half mile above the Cacapon \$20,815, as subsequently estimated by Mr. Fisk	- - -	64,815	00
Amount of first estimate for the 27½ miles	- -	707,151	20
2d. Estimate of Mr. Fisk, of the 22d of January, 1836, including the half mile next above dam No. 5, but excluding the dam No. 6, and the half mile above the Cacapon, a dam at this point not then being contemplated	- - -	1,022,534	00
Deduct lock No. 54 and its lock-house, not now embraced in the "27½ miles" division	- -	12,869	00
		1,009,665	00
Add for dam No. 6 and guard-lock, \$91,000, and for the half mile above the Cacapon, \$20,815, as subsequently estimated by Mr. Fisk	- - -	111,815	00
Amount of the second estimate for the "27½ miles"		1,121,480	00
3d. Estimate of Mr. Fisk, of June 1, 1836, exclusive of dam and half mile	- - -	1,183,099	00
Deduct lock No. 54 and its lock-house, as estimated at this time, (June, 1836)	- - -	13,832	00
		1,169,267	00
Add as before, for dam and half mile	- -	111,815	00
Amount of the third estimate for the "27½ miles"	-	1,281,082	00
4th. Estimate of Mr. Fisk, of December, 1836, for the whole "27½ miles," (the dam and half mile being included, and lock No. 54 and its lock-house being excluded)	- - -	1,448,269	00
5th. Actual cost of work done up to the 1st of December, 1837	- - -	1,217,176	96
Add what it is supposed will be necessary to complete this work	- - -	342,823	04
(See my remarks above.)			
Supposed actual cost of the "27½ miles"	- -	\$1,560,000	00

The above estimates embrace all that is chargeable to construction, excluding land damages and superintendence.

For the comparison of the several estimates to apply over the whole "27½ miles," as may be seen, it is necessary to make additions and deductions in some instances of estimates made by another person, or of estimates made by the same person, but at a different time. In all cases, however, the nearest subsequent estimate to the one under consideration is made use of.

It is proper to remark, also, that an estimate was made by Mr. Fisk, in June, 1835, for a part of the masonry and difficult sections upon the "27½ miles," in amount \$647,421; but as it did not embrace near the whole of the division, it cannot be used for comparison. This estimate, however, will be in possession of the committee.

We will place these estimates in one view:

1st. Mr. Cruger's, March 20, 1834	-	-	-	\$708,151
2d. Mr. Fisk's, January 22, 1836	-	-	-	1,121,480
3d. Mr. Fisk's, June 1, 1836	-	-	-	1,281,082
4th. Mr. Fisk's, December 1, 1836	-	-	-	1,448,269
5th. Actual cost, (in part supposition)	-	-	-	1,560,000

It thus appears (and we have the test of an expenditure of upwards of \$1,200,000 on the "27½ miles") that the engineer's estimate of January, 1836, needs an addition of 40 per cent. to give the actual cost.

I feel it incumbent on me to explain this. It is a duty I owe to the Legislature, to the canal company, to myself. I should so deem it to be under any circumstances, and none the less so, when I consider that, accompanying the presentation of the estimate to the Legislature in January, 1836, there was, in compliance with their requirement, a certificate, under oath, that that was "a correct estimate, to the best of my knowledge and judgment." (Reference, of course, is only had to so much of that estimate as was made out by me, viz: from dam No. 5 to the South branch, 58 miles; the balance of the distance to Cumberland, 19½ miles, having been estimated by Mr. Purcell.)

An excess of the *actual* beyond the estimated cost of work may arise from two causes: from the work not being done within the prices of the estimate, and from an under estimate of quantities. Both shall be considered:

1st. Prices.—It is within the knowledge of every one, that, for almost during the whole period since January, 1836, provisions of all kinds, and labor, have been unusually high; that they could be had only at prices far exceeding former rates. For a part of the time, indeed, no wages within the bounds of reason could command the requisite number of mechanics and laborers for carrying on our operations. Flour, when we were making out the January 1836 estimate, could be had at from \$5 to \$5 50 per barrel. What else could be the consequence of the change of times, than a great increase of the cost of work? The masonry of five of the locks on the "27½ miles," costing upwards of \$60,000, was put under contract before the 1st of January, 1836, at prices 15 per cent. under the engineer's estimate of that date. The contract for these locks, upon the change of times, was given up, and the work relet. They are now nearly

finished at prices 26 per cent. above the same estimate. Many similar cases might be enumerated, but it can hardly be necessary. The board, you will recollect, by one order, made advances on several contracts, equivalent to nearly 10 per cent. on the engineer's estimate for the whole "27½ miles." But even with this, and other relief, many contracts have, from time to time, been given up, and the work relet at prices almost invariably from 25 to 40 per cent. higher than the January 1836 estimate.

Were the prices of that estimate sufficiently high for the time when it was made? They were so, in my opinion, then. I have had no cause to think otherwise since. This assertion, however, must, in the nature of things, be taken generally; for, in the great number and variety of items that enter into an estimate of 27½ miles of canal, it cannot but happen that there will be instances where the engineer will be under the value, when, upon an average of the whole, he is above.

A reference to the prices at which similar work had been previously executed upon this canal, goes to sustain the assertion that the prices of the January 1836 estimate were sufficiently high for the time; and we have still additional evidence of it, in the fact that the work then under contract was at prices considerably under the estimate, even when the board were governed by the rule not to accept the lowest bid, unless from persons they considered responsible.

Our canal has not, alone, felt the effects of the change of times: other works have equally suffered. An engineer of high standing, in charge of various works in different parts of the United States, (Judge Wright,) informed me a year since, that the directors of one of the companies with which he was connected, after a thorough investigation of the subject, added to the prices of all their contractors 30 per cent. for the increased worth of work caused by the change of times in one year; that they considered this economy rather than suffer the existing contracts to be abandoned, and the work relet, as it would inevitably be, at a still greater advance of price.

In this connexion, I will briefly allude to a very important cause of the great cost of work on our canal; one that has no reference to changes of times, or the cost of provisions. I know not that a more appropriate occasion than this can be selected for the purpose, inasmuch as the influence of this cause, to which I am about to refer, has been more severely felt on the "27½ miles" than hitherto, and will continue to be felt, perhaps, in a still greater degree, in our progress towards Cumberland, unless legislative action shall be efficiently exerted to prevent it.

Not one individual of the large body of Irish laborers along the line of the canal dares testify against another of their number in a court of justice. A murder may be committed—a hundred of them may witness it—and yet not one person can be found who knows any thing about it. The remark upon all this, by the citizens of the State, is very apt to be, that these men do not interfere with the inhabitants; that their quarrels are among themselves, or between the two parties

into which they are divided. Grant, for the moment, that their quarrels are among themselves. Who feel the consequences? The company, and, as a stockholder, the State. Let me mention a few facts. I have known a contractor on the "27½ miles" forced to give up his contract, his shanties burned, and death threatened, if he could be caught, simply because the engineer, as he had a right to do under the contract, had discharged from the line some notoriously worthless and disorderly men; and the contractor *was suspected* of having given information to the engineer.

Again: at the time of our greatest pressure for mechanics, several excellent masons, perfect strangers to all on the line, were induced to go up to the neighborhood of Hancock. They worked for one day, but were given to understand that they must not remain. They, in consequence, immediately returned to Washington.

Such are not solitary and rare occurrences. Many, and many, and many an instance have I known, in which quiet, peaceable, orderly, and well-disposed persons, from among the Irish laborers, have been driven off from our canal, by their countrymen, simply from unwillingness to submit to the dictation of a tyrannical, secret, party organization, which, for the last two years, has been entirely beyond the reach of all law, all authority.

True it is, these persons elsewhere have their quarrels and disputes among themselves; but they have rarely, as has been the case with us, been permitted to act with that organization as a body, that enables them to control the operations of a whole work.

The consequences of such a state of things will at once suggest themselves to every one who reflects upon the subject. Mechanics out of employ elsewhere, often refuse to come upon our work for no other reason, than that the laws of the State afford them no protection when upon it. Other works, in other States, where the laws are respected, have comparatively a quiet and orderly body of laborers; the worthless leave them, and congregate, of course, where they will be least subject to the restraints of law.

But it is not the case, as admitted for the moment, that the quarrels of these persons are confined to themselves. I have known instances in which native citizens, laboring upon the "27½ miles" of canal, have been driven away from it; and repeatedly have German laborers been forced to quit the line.

This state of things, alone, I know has been very instrumental in keeping up the high prices of labor upon our canal. Its effects are felt in several ways. It keeps down the supply of labor below the demand. It gives us an inferior class of workmen. And afraid to give them directions contrary to their will, the contractor is sometimes, to all intents and purposes, under their control.

Notwithstanding all this, there are upon our canal many well-disposed and quiet laborers. Yet, although they may even be a majority in point of numbers, they are still under the control of that secret organization of which I have spoken. To these well-disposed persons I feel that I shall do a service, if by any means I can be

instrumental, in the least, in inducing an action, by the competent authority, that shall enforce quiet and good order upon our work. It is practicable; and recent movements on the part of the authorities of Washington and Allegany counties show that they have a willingness and disposition to give their aid. I will refer to a late occurrence. Having been regardless of all civil authority on the "27½ miles" of canal, along the narrow territory of the State of Maryland, (at one point less than two miles in width,) the idea, at last, became prevalent among the laborers, that in the mountains of Allegany county no force, in support of the laws of the State, could be brought to bear upon them. They conducted themselves accordingly. At length, upon the occurrence of an outrage, or rather of several—tearing down buildings and threatening lives, in open day, at Oldtown, in presence of many of the inhabitants, by upwards of four hundred men, who had come more than twelve miles for the purpose—the sheriff of the county, with a military force from Cumberland and other parts of the county, together with citizens from Virginia, assembled, arrested ten of the ringleaders, and have them now in jail awaiting their trial. The effect of this movement by the authorities of Allegany county, so far as we can judge in the short time that has since elapsed, has been and will be of great service, and has satisfied me, in addition to previous observations, that provision can be made by the Legislature that shall cause the laws of the State to be respected; and if so, one of the great difficulties we have had to encounter for the last two years, in obtaining a sufficiency of laborers, will be done away. There will be a great improvement in the character of the line; and, as a necessary consequence, we shall do our work at less cost.

So firmly convinced am I of the good effect of the recent exercise of civil authority in Allegany county, that I have little doubt, should, unfortunately, our present embarrassments end in a total suspension of our work, we shall have much less to fear than we otherwise would have from the laborers who will be thrown out of employ. Indeed, had this authority not been exercised, I do not believe we should have escaped thus long from acts of violence on the part of the laborers, from want of confidence, caused by the inability of the company, for the last two months, promptly to meet its engagements.

If the work should be entirely suspended, it can hardly be supposed that 3,000 laborers will quietly disperse—suddenly thrown out of employment, with money due to them, and many of them without the means of taking them elsewhere—especially little accustomed as they are to the restraints of law.

These remarks lead me to the consideration of another view connected with an inquiry into the causes of high prices on our canal compared with other works. The "27½ miles" of canal was commenced immediately after the company had been for some considerable time in a very embarrassed situation. She was in bad credit among laborers abroad; and with companies, as with individuals,

confidence is not to be restored in a moment. Men of intelligence, in the neighborhood of a work, easily make themselves acquainted with its means, and satisfy themselves of its solvency; but for its operations a company has to depend upon a large number of laborers who are to be induced to come from a distance, a class of men whose opinions of the public works of the country depend upon common report, to change which requires time; and, besides, they are persons who have seldom the means to travel far. Often, indeed, have their employers to pay their travelling expenses in getting them from one work to another. It should be understood that all the laborers previously upon the canal had left it before the commencement of operations on the "27½ miles," and that they had left it under no very favorable impressions.

We are now again experiencing the commencement of a recurrence of embarrassments similar to those I have referred to as having occurred immediately prior to the placing under contract the "27½ miles." I have said similar embarrassments; but if continued, the consequences will be much more serious.

What are the facts? Under all the difficulties of which I have spoken—previous embarrassments, the change of times, and the want of a proper exercise of civil authority—we had at last succeeded, in the course of upwards of two years, by sending agents to the North, and by high wages, in bringing to our work a large number of mechanics and laborers, just as we were drawing towards a close our operations upon the "27½ miles." In this state of things, what was the course indicated by economy and good sense, founded on past experience? A plain and manifest one. Place under contract the balance of the work to Cumberland, that should give employment to every mechanic and laborer thrown out of employ from time to time by the gradual completion of the several contracts along the "27½ miles." This the board attempted to do, but have been defeated by a want of means. Already have we witnessed the consequences to an extent that time and money only can make good. Mechanics, that ought immediately to have found employment on the work above, as the masonry drew to a close last fall upon the "27½ miles," have, for want of that employment, left our work and gone elsewhere. Many of the laborers, also, have done the same. To such an extent has this gone, that I feel confident—let what may be done now to lessen the evil consequences—we cannot, short of a year in time, and a continuance of high wages for a long period, make good what we have lost. I repeat, deliberately repeat it as my firm belief, that our work could have been finished to Cumberland one year sooner than it now will be, if our operations could have gone on without the existing embarrassments from a want of means; and that with this extension of time, will be connected the necessity of keeping up high wages to induce men to come back to our work, although produce may fall, and wages be reduced elsewhere. Immediate relief, though it cannot remedy the past, may yet do much

to lessen the anticipated and dreaded consequences of the present state of affairs.

As evidence in part of some of the preceding remarks, I will give the amount of work done per month above dam No. 5, ever since the commencement of the "27½ miles." The statement will show how slowly and gradually we were able to increase the force upon the work, under the various difficulties that were to be contended with.

The amount of work in the first month of operations, August, 1835, was -	-	-	-	-	\$8,998
In the three next months of September, October, and November, 1835, the amount of work, per month, was -	-	-	-	-	21,068
In December, 1835, and January and February, 1836, (in winter there is always less done per month,) the amount of work, per month, was -	-	-	-	-	17,386
In March, April, and May, 1836, per month -	-	-	-	-	31,201
In June, July, and August, 1836, per month -	-	-	-	-	43,911
In September, October, and November, 1836, per month -	-	-	-	-	45,055
In December, 1836, and January and February, 1837, (winter months—see remark above,) per month -	-	-	-	-	40,419
In March, April, and May, 1837, per month -	-	-	-	-	63,273
In June, July, and August, 1837, per month -	-	-	-	-	92,808
In September, October, and November, 1837, per month -	-	-	-	-	104,271

Let the force now upon the canal (already weakened, as has been remarked, particularly as regards mechanics) be driven from it, and be scattered around among the other works of the country; and, I ask, shall we not go back to our situation in 1835, and be forced, upon the renewal of the work, to retrace our steps with the same slow advance?

From what has already occurred, if for no other reason, wages must, for some considerable time, continue high. Of the effect, some idea may be formed when it is considered that an advance of 3 per cent. alone adds \$100,000 to the cost of the work remaining to be done to reach Cumberland; and besides, add but one year to the time required for the completion of the canal to Cumberland, and you add 6 per cent. interest on the two-million loan, equal to \$120,000, that has to be repaid from funds appropriated to the construction of the canal.

I hope to be pardoned for having made remarks on some subjects that may be supposed not properly within my province to speak of. I have made them because I know the *engineer's estimate*, in public opinion, is often held accountable for consequences over which the engineer has no control.

I do not hold myself responsible in the least degree for any of the increase of the actual, beyond the estimated cost of the work, so far as occasioned by either of the causes of high prices, of which I have spoken of *some* of them, because I deemed it my duty to bring them

to the notice of the only authority that has the power to apply the corrective. *My* duty, because from my situation I feel myself better qualified than any other one to speak of them.

I will here make a remark, in view of the early completion of the canal to Cumberland being very desirable. In ordinary times, when labor can be commanded, and the civil authority is respected, 30, 40, or 50 miles of canal can be constructed in the same time as 20 miles. Over 50 miles, there will be double the number of contractors, and there can be double the number of laborers that there will be on 25 miles. This remark is made for the sake of adding, that if the circumstances of the company for the next year or two force them to confine their operations to a portion only of the 50 miles between dam No. 6 and Cumberland, you will add that much to the time needed for reaching that point.

I will close this part of my remarks by quoting from my evidence before a joint committee of the Legislature in March, 1836, viz: "I can readily imagine circumstances to occur, going to enhance, while I can think of none tending to diminish, the cost of labor, and of course the prices of work upon which the present estimate (that of January 1836) is based."

2d. The next subject for consideration in regard to the increased cost of the "27½ miles" is, whether any part of it is chargeable to an under estimate of quantities in January, 1836. I answer, plainly, in the affirmative. There is an increase of quantities in construction beyond the estimate, but not to an extent that can comparatively be considered of importance.

So soon as the revised estimate of the "27½ miles," now in preparation, shall be closed, it will be in the power of any one, by comparing the quantities of the estimate of January, 1836, and the present one, to ascertain the increase in cubic yards of each item of work.

Accompanying the final estimate of the "27½ miles" after its entire completion, there shall be an analysis of the original and of the final estimates, showing how much of each is for the promotion of the trunk of the canal and of its banks—work, as regard quantities, not contingent; and how much is for the preparation of the natural surface of the ground, upon which the embankments rest, and for the security required to guard against leakage and breaches, which are contingent, and the amount of which must depend upon information acquired and discoveries made during the progress of construction; and further, shall be shown where, and to what extent, there has been a change of items, from less to more costly, and the reverse, caused by meeting in the excavations with a different kind of materials from what was anticipated.

The result will show that the main increase of quantities is in the contingent item required to make the canal secure, that could not with certainty be known until after construction. My directions to the assistant engineers in immediate charge of the work have invariably been never to stop short of safety in construction, at any point, from the consideration of there having been error in originally

supposing that a less amount of expense would make the work secure at such a point. But, as before remarked, the increase of the *actual* over the *estimated* cost would not be considered, comparatively, of much account, had there been no increase of the prices of the work.

It may be thought that the engineer, in the estimate of January, 1836, ought to have made a larger contingent allowance. To this I reply that that estimate so far exceeded some of the preceding estimates, that it was considered by many, at the time, to be much too high. Under such circumstances, it was natural that the person making the estimate should have had some distrust of himself, and that the effect upon him should be an impression that he had, if either way, been too liberal in the details of the estimate in providing for the worst; and that therefore, a still further provision in the shape of a general contingent allowance was not necessary. Such, under the circumstances, might naturally occur.

I will here notice, as I think not unappropriately, the opinion that was at one time quite prevalent, but which I am aware is fast losing ground, that the canal is constructed upon a plan and of dimensions much too costly.

Such persons have always referred to the Erie canal. To those, if there are any, who still consider our canal too large, because the Erie canal was made smaller, I would say that that canal is now in the progress of enlargement to a width twenty feet, and a depth one foot greater than our canal. And to those who think our work is upon too costly a mode and plan of construction, I would say that the locks and aqueducts on the enlargement of the Erie canal are now in the progress of construction upon plans fifty per cent. more costly than the corresponding work upon the Chesapeake and Ohio canal.

I will close my answer to the first of the two questions that I proposed to myself in the commencement of this communication, by saying that I will gladly and willingly, and that I am anxious to do so, give any explanations of the several engineers' estimates, that I am informed will be placed in possession of the committee, that the committee may think necessary to aid them in their inquiries.

The last of the two questions that I propose to answer now comes up for consideration.

2. What will be the cost of the work yet to be done to finish the canal to Cumberland, applying such corrections to the January 1836 estimate as the answer to the preceding question shows to be necessary?

No corrected revised estimate for the work now remaining to be done to reach Cumberland, has been made since January, 1836. There has only been a revised estimate of so much of the work as was put under contract at a letting in September last, made at that time. The original of this estimate will be in possession of the committee. This estimate was based, in part, upon a revision of the location and calculations of January, 1836, and to that extent such

corrections were applied as were found to be necessary; and so far as this revision of location and calculation was not made, still such corrections were applied to the quantities and prices of the January 1836 estimate, as judgment indicated, in view of the information and experience acquired on the "27½ miles."

At the letting referred to (September, 1837) there was work let to the amount of nearly two millions of dollars.

I have taken the sections of this September letting, and to the quantities of the estimate of that date have applied the prices at which the work was let, and find that the result, which in amount exceeds one and a half million, is $40\frac{3}{10}$ per cent. above the January 1836 estimate of the same work. A per centage very nearly the same as that of the *actual*, above the estimated cost of the "27½ miles."

We will now ascertain what will be necessary to finish the canal to Cumberland, adding 40 per cent. to the January 1836 estimate.

1st. Mr. Fisk's estimate of January, 1836, from dam	
No. 5 to Cacapon	\$1,022,534
2d. Mr. Fisk's estimate of same date, thence to the S.	
Branch	1,793,048
3d. Mr. Purcell's estimate of same date, thence to Cum-	
berland	745,037
	<hr/>
	3,560,619
Add 40 per cent.	1,424,248
Add dam No. 6, and grand lock, (the first estimate)	91,000
Add increased cost of section 257, caused by dam No. 6,	
(the first estimate)	14,881
Add increased cost of section 258, (from recollection, ac-	
cidentally not having at hand the correct amount)	24,000
Add increased cost at Cumberland, by continuing the	
canal three-fourths of a mile to near the mouth of	
Will's creek	36,180
	<hr/>
Total cost of construction from dam No. 5 to Cumberland	5,150,928
Deduct amount of work done on the 1st December, 1837,	
on the same line, as appears from my estimate book,	
viz:	
Between dams Nos. 5 and 6	\$1,216,766 96
Between dam No. 6 and Cumberland	177,861 52
	<hr/>
	1,394,629
	<hr/>
	5,150,928
	1,394,629
	<hr/>
Total of construction remaining to be done, to finish the	
canal to Cumberland, on the 1st December, 1837	\$3,756,299

To this sum of \$3,756,299, there should be added the present

debts of the company—there should be added \$120,000 multiplied by the number of years that will be required to reach Cumberland, (interest on the two-million loan,) and there should be added, also, the cost of land yet to be acquired—besides the contingent expenses of officers, &c.

The items in this statement of dam No. 6, and the consequent increased cost of sections 257 and 258, and of the extension of the canal into Cumberland, did not enter into the January 1836 estimate.

Dam No. 6 was not a part of the plan of the canal when that estimate was made—because, with means sufficient for a simultaneous construction of the whole line to Cumberland, or even with only means enough for the construction of the canal to the site of what is now called dam No. 7, the cost of this dam (No. 6) could have been dispensed with.

But when the construction of that dam was determined upon, the situation of the canal company was this: either it must be built, or else, upon the completion of the “27½ miles” of canal, there would be no feeder to fill it, at least two or three years afterwards, or longer, should there be difficulty in raising the means to prosecute the work.

I must not be misunderstood, however, as saying that dam No. 6 will not in time prove very serviceable to the canal company, in view of a future improvement of the Cacapon; for, if necessary, I could give reasons, as I think, satisfactory to show that it will be. Yet its construction might have been deferred until after the completion of the canal to Cumberland, could the company have had at command a sufficiency of means; and as to the extension of the canal into Cumberland, in my opinion it was necessary. I am aware others may think differently.

Respectfully submitted.

CHARLES B. FISK, *Chief Engineer.*

HON. G. C. WASHINGTON,

President Chesapeake and Ohio Canal Company.

No. 4.—*General abstract of the Receipts and Expenditures of the Disbursements in the*

	Receipts in the month.	Aggregate receipts.
To capital stock - - - -	\$788 97	\$3,819,474 88
To State of Maryland - - -	-	2,000,000 00
To profit and loss - - - -	-	2,844 85
To acquisition of lands - - -	-	1,109 91
To Baltimore & Ohio Railroad Company	-	268,723 02
To construction of the canal - -	-	6,807 20
To engineer department - - -	-	2,500 24
To interest - - - -	3,376 93	65,923 43
To law expenses - - - -	-	2,030 54
To Potomac company—general account	-	418 52
Unclai'd dividends	-	366 30
Tolls account - - - -	-	26,017 20
To tolls account - - - -	-	160,678 80
To notes payable - - - -	80,000 00	152,000 00
To notes re-issuable—under \$5 - -	5,834 98	79,634 98
\$5 and upwards - - - -	57,740 91	212,000 00
	147,741 79	
Deduct transfer	1,224 86	
	146,516 93	
Statement of warrants which have issued upon the Treasurer, and have been by him addressed, but have not been paid or charged by the several banks on which they were drawn, viz :		
Washington County No. 7697	\$1,682 40	
7734	800 80	
	2,483 20	
Bank of the Metropolis 7701	-	7 44
Farmers and Mechanics' 7733	110 34	
7750	12 00	
	122 34	
Bank of Washington 7763	15,000 00	
	17,612 98	
		6,800,529 87

TREASURER'S OFFICE, *Chesapeake and Ohio Canal Company,*
Washington, January 1, 1838.

Chesapeake and Ohio Canal Company, and of the Receipts and month of December, 1837.

	Disbursements in the month.	Aggregate ex- penditure.
By corporation of Washington - -	-	\$175,000 00
By corporation of Georgetown - -	-	41,400 00
By contingent expenses - - -	-	37,370 21
By acquisition of lands - - -	-	342,739 69
By western section - - -	-	4,037 08
By construction of the canal - -	132,297 41	5,605,594 70
By engineer department - - -	-	196,670 23
By interest - - -	16,188 33	225,849 61
By law expenses - - -	-	21,384 14
By Potomac company—general account	-	373 65
Unclai'd dividends	5 55	11 10
Tolls account - - -	-	13,426 07
By toll account - - -	-	1,222 38
By pay of lock-keepers - - -	-	24,238 26
By pay of officers - - -	2,393 00	74,229 02
By postages - - -	-	842 80
By printing - - -	653 12	8,728 63
By stationary - - -	121 25	2,671 37
	151,658 66	6,775,788 94
Deduct transfer	1,500 00	
	150,158 66	
By balances to the credit of the Chesapeake and Ohio Canal Company, in—		
Bank United States, Washington -	34 09	
Bank of Washington - - -	17,431 18	
Patriotic Bank - - -	1,080 71	
Bank of the Metropolis - - -	60 03	
Farmers & Mechanics' Bank, Georgetown	1,039 17	
Union Bank - - -	146 66	
Bank of Potomac, Alexandria - -	1,230 26	
Cumberland Bank of Allegany - -	1,670 88	
Washington County Bank, Williamsport	1,616 18	
Bank of the Valley, Charlestown -	12 09	
Bank of the Valley, Leesburg - -	419 68	
		24,740 93
		6,800,529 87

E. E.

ROBERT BARNARD, *Treasurer.*

No. 5—Statement exhibiting the cost of execution of the Chesapeake and Ohio Canal, to 1st December, 1837.

1st division	Extending from the mouth of Tyber creek to the mouth of Seneca.		
2d do.	Amount paid for execution - - -	\$1,433,315 54	
	Extending thence to Point of Rocks. Amount paid for execution -	589,781 40	
		2,023,096 94	
	Add sundries paid - - -		
	Balance due - - -	58,428 61	
			\$2,081,525 55
3d do.	Extending thence to U. S. dam, Harper's Ferry. Amount paid for execution - - -	701,028 63	
	Add sundries paid - - -		
	Balance due - - -	2,128 24	
			703,156 87
4th do.	Extending thence to dam No. 5. Amount paid for execution - - -	1,234,940 14	
	Add balance due - - -	6,593 22	
			1,241,533 36
	To the aggregate of the above four divisions must be added the following, which are not without great labor and research separable, so as to charge each with its proper respective proportion, viz :		4,026,215 78
	Repairs, specific - - -	67,426 90	
	Repairs and improvements, general - - -	145,860 03	
	Superintendence - - -	12,828 89	
			226,115 82
	Aggregate to dam No. 5 - - -	-	4,252,331 60

5th do.	Extending from dam No. 5 to dam No. 6.	Amount paid for execution	1,109,042 01
	Add sundries paid	- \$802 00	
	Balance due	- 105,241 69	
			106,043 69
6th do.	Extending above dam No. 6.	Amount paid for execution	153,138 71
	Add balance due	- 23,422 21	
			176,560 92
		Grand aggregate	\$5,643,978 22

E. E.

OFFICE OF THE CHESAPEAKE AND OHIO CANAL COMPANY,
Washington, January 22, 1838.

JOHN P. INGLE,
Clerk Chesapeake and Ohio Canal Company.

Detailed statement of the cost of execution of the Chesapeake and Ohio Canal to the 1st December, 1837.

Divisions of the canal.	Sections and tow-paths.	Locks and stop gates.	Lock-houses.	Aqueducts.	Culverts.
1. From mouth of Tiber to mouth of Seneca creek	830,983 68	293,246 22	15,120 14	24,068 25	56,293 72
2. From thence to "Point of Rocks" -	330,366 07	55,002 23	3,128 75	129,671 68	65,406 52
3. From thence to U. S. dam, Harper's Ferry -	361,204 47	137,574 47	8,708 18	44,762 93	37,928 38
4. From thence to dam No. 5 -	846,536 68	128,242 79	7,600 46	71,875 05	53,937 67
5. From thence to dam No. 6 -	742,520 32	88,440 95	1,701 60	79,015 40	128,535 46
6. From thence upwards -	61,831 15	5,910 22	-	7,743 60	5,671 58
Dollars -	3,173,442 37	708,416 98	36,259 13	357,136 91	347,773 33

Divisions of the canal.		Tunnel and deep cuts.	Dams.	Waste waters.	Roads.	Bridges and ferries.
1.	From mouth of Tiber to mouth of Seneca creek	-	107,130 41	24,262 29	26,927 13	32,754 09
2.	From thence to "Point of Rocks"	-	-	1,357 61	-	286 75
3.	From thence to U. S. dam, Harper's Ferry	-	149 00	1,776 47	103,252 35	5,702 38
4.	From thence to dam No. 5	-	116,260 23	2,474 88	-	8,012 38
5.	From thence to dam No. 6	-	48,299 66	18,289 17	2,239 45	
6.	From thence upwards	71,982 16				
Dollars		71,982 16	271,839 30	48,160 42	132,418 93	46,755 60

No. 6—Continued.

Divisions of the canal.	Feeders and basins.	Sundries paid.	Balance due.	Repairs and improvement, superin'dence.	Grand aggregate.
1. From mouth of Tiber to mouth of Sen-creek	22,499 61	} 57,100 26	1,328 35		
2. From thence to "Point of Rocks"	4,561 69		2,081,525 55		
3. From thence to U. S. dam, Harper's Ferry	-	1,020 76	1,107 48	703,156 87	4,252,331 60
4. From thence to dam No. 5	-	-	6,593 22	1,241,533 36	
5. From thence to dam No. 6	-	802 00	105,241 69	-	1,215,085 70
6. From thence upwards	-	-	23,422 21	-	176,560 92
Dollars	27,061 30	58,923 02	137,692 95	226,115 82	5,643,978 22

E. E.

OFFICE OF THE CHESAPEAKE AND OHIO CANAL COMPANY,

Washington, January 22, 1838.

JOHN P. INGLE,
Clerk Ches. & Ohio Canal Company.



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